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DEPARTMENT OF EDUCATION—THE CITY OF NEW YORK
DIVISION OF REFERENCE AND RESEARCH

UNIVERSITY OF
OCT 1915

Semi-Annual Report

JULY 1, 1915

PUBLICATION No. 12

Semi-Annual Report

of the

Division of Reference and Research

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OCT 1915

JULY 1, 1915

DEPARTMENT OF EDUCATION—THE CITY OF NEW YORK

THOMAS W. CHURCHILL,
President, Board of Education

ALBERT SHIELS,
Director of Reference and Research

TABLE OF CONTENTS

PAGE

Letter to the President 5

A. ORIGINAL REPORTS OF THE DIVISION OF REFERENCE AND RESEARCH NOT ALREADY PUBLISHED OR RESERVED FOR SEPARATE PUBLICATION

I. *Kindergarten and Elementary Instruction*

a. A report on the organization of kindergartens in large cities 10

b. The rating of teachers by 110 principals in ten hypothetical cases 17

c. The results of the sessions of opportunity classes conducted in 1914 51

d. Time distribution in the elementary course of study 53

II. *Secondary Instruction*

A record of elimination and survival in the first three terms of New York City high schools for 14,158 pupils 63

III. *Miscellaneous and General*

a. A summary of reports or other actions of the Department of Education of The City of New York, in relation to the New York School Inquiry Reports 73

b. Note concerning the records of legal decisions compiled by the Division 79

B. COMPILATIONS AND REFERENCES TO VARIOUS REPORTS ON EDUCATIONAL PROGRESS

I. *Kindergarten and Elementary Instruction*

a. Aiding elementary teachers to understand the kindergarten—a New York experiment 82

b. Advanced kindergarten work in the elementary grades—a Boston experiment 82

c. A course of study in grammar based on the grammatical errors of school children in Kansas City 84

II. *Secondary Instruction*

a. The junior high school, and the six-and-six plan .. 90

b. Studies and reports on English by associations or committees of high school teachers of New York City 91

c. Bulletins of the Illinois Association of Teachers of English 95

d. How high school pupils in St. Louis use their time 96

379.7471
N484
no.12

PAGE

e. The study period
1. Present tendencies in the supervision of study 97
2. The Newark plan 100
3. The Waltham plan 101
4. The abolition of home study in Sacramento. 101
5. Learning to study 102
6. The use of study halls—an investigation made by Miss Ella A. Busch, of Erasmus Hall High School 103

III. *Vocational Instruction*
a. Instruction in stenography and typewriting in high schools—an investigation of modern business practice and methods of teaching 109
b. A suggested terminology for vocational and industrial instruction 112
c. Courses for apprentices and compulsory attendants in Wisconsin 113
d. Vocational courses in the Chicago schools 115
e. Short-unit courses 116
f. Notes on vocational and industrial instruction 118

IV. *Vocational Guidance*
a. A suggested query for pupils as a guide to vocational counsellors 120
b. An attempt to obtain the opinions of professional and business men concerning courses of study .. 122
c. A study of the employment of boys of high school age in Iowa 124
d. A vocational record card 127
e. A neighborhood association experiment in vocational guidance for pupils after leaving school .. 128

V. *Surveys and Tests*
a. A summary of the year's surveys 130
b. The Cincinnati survey of the printing trades 132
c. A business survey of the Minneapolis school system 137
d. The Chicago school survey 138
e. Recent applications of tests
1. The Milwaukee selftesting cards 145
2. Business tests of the National Associated Schools of Scientific Business 145
3. The Courtis tests in Indiana 147

VI. *Miscellaneous and General*
a. School text-books
1. The selection of text-books and the teachers' relation thereto 151

PAGE

2. Standardizing the selection of text-books... 152
b. School and home gardens in cities..... 154
c. Keeping the pupils in school—a New Orleans experiment 155
d. The pay of school janitors; a salary schedule prepared by the janitors of the Cambridge, Mass., schools and accepted by the Board of Education 156
e. A school for janitors..... 158
f. Reporting accidents in schools—a form used in the Milwaukee schools..... 158
g. The relation between obstructed breathing and memory—a study by Felix Arnold..... 159

VII. *Notes on Some Publications of Special Interest to Teachers*
a. Kindergarten and elementary instruction
The Montessori method—The Gary schools—A bibliography for teachers of history in elementary schools—Some books on children's reading and story telling..... 160
b. Secondary and advanced instruction
The organization of training schools in the United States—The education and training of teachers in European countries—Bibliography of the Relation of Secondary Schools to Higher Education—Curricula in mathematics in the United States and European countries compared—A course of moral instruction in high schools—A manual of debate for high schools 163
c. Vocational instruction
Cooking for the home—Trade schools in European countries—Publications concerning vocational instruction..... 165
d. Vocational guidance
Papers on vocational guidance..... 165
e. Miscellaneous
Drawing and art in the schools—The present status of music teaching—The health of school children—Facts regarding education for the home in American schools—School savings bank—A traveling educational museum—Teachers' salaries..... 166

DEPARTMENT OF EDUCATION, THE CITY OF NEW YORK
DIVISION OF REFERENCE AND RESEARCH

July 1, 1915.

The Honorable THOMAS W. CHURCHILL,
President, Board of Education.

DEAR SIR:—In accordance with the provisions of Section 33A of the By-Laws, I am submitting for the information of the Board of Education a report on the work of the Division of Reference and Research for the six months ending June 30, 1915.

Not all of the work done by this division is of general interest and, therefore, not all is mentioned in this report. What is not here included will be found in the monthly statements regularly presented to you as President of the Board. It is sufficient, therefore, to note the fact that, besides the preparation of special reports and the compilation of educational data, the activities of the Division of Reference and Research include:

(1) A bureau of routine information which within six months has responded to nearly six hundred letters, many of the answers requiring considerable investigation; has answered more than seven hundred telephone calls, and, through the information clerks, has had interviews with 1,665 persons.

(2) A bureau for the investigation of complaints which has been the means of adjusting many difficulties, the result of reciprocal misunderstandings.

(3) A bureau which records the general population and the school attendance, mapped by boroughs, districts and single blocks for the whole City, and which has made important and detailed reports affecting the selection and surrender of sites and buildings.

(4) A bureau for filing in detail reports from newspapers, educational periodicals and school and college publications, by which the progress of education may be recorded. This bureau is also compiling complete records of the members of the board and its committees, of local school boards, of acquisition of property and erection of buildings, since the inception of the Board of Education.

The need for a division of reference and information, both general and special, has been so pressing that the opportunities for original research have been limited until the present year. It is true that the reports presented to the Committees of the Board and to yourself have involved very careful study, but they have been prepared because of an immediate and pressing need for information rather than as a part of a larger general plan of educational research.

At the present time the Division is undertaking two studies less directly related to economy in organization and administration and concerned rather with questions of teaching.

The first of these is the application of a series of intelligence tests in ten schools in grades five, six, seven and eight, of a type suggested by Professors William Henry Pyle and Edward L. Thorndike with the latter's assistant, Mr. M. R. Trabue. The results of these tests will be compared with those in school subjects and the degree of correlation will be observed. The tests are being conducted in co-operation with the City Superintendent of Schools and the head of his statistical department. The ten principals who are working with the Superintendent and with the Director of this Division were selected only after they had given expression of their own interest and of the willingness of the teachers associated with them to co-operate in the work.

A second investigation will take up the examination of the school history of tweny-five hundred pupils. The work is to be done in this Division, from the data afforded by record cards. This study may discover what correlation there may be between the school grade and the age of each pupil with advancement and retartdation. Some information should be gained respecting the value of special classes. Should the figures suggest decisive

conclusions, these can be verified by increasing the number of cases considered.

The facilities which this Division has to offer for the distribution of information concerning educational practice and development are not yet a matter of general knowledge among the members of the supervising and teaching corps. Doubtless when these facilities are understood, a demand for specific data and precise information respecting the school system of the City and that of other communities will be correspondingly greater. However, abundant use of the Division has been made by the Board of Education, its members and committees, as well as by individuals and associations both in and out of the City.

The Division was in two cases only obliged to decline a request of members of the supervising corps to compile and tabulate information, because the labor involved in complying with the request was so great and the time available for the purpose so limited.

In this report I venture to call attention to the following: the study of ratings of teachers with results that raise a grave question as to the value of the method now in practice; the inquiry of results of instruction in summer opportunity classes; the time distribution of elementary courses of Study in New York City compiled by this Division; the study of high school mortality, which study, though not intensive, is more accurate than the usual figures upon the subject; and the summary of considerations of the New York School Inquiry Reports. It is rare that such attention to findings and conclusions is given as has been bestowed by the Department of Education and its officers upon the last-named reports.

During the school year ending June 30, 1915, the Division issued six bulletins. It is unnecessary to refer to them further than to state that many commendatory notices from different parts of the country have been received—a matter of gratification to those who co-operated in the preparation of the pamphlets. The publications respecting a more economical administration, notably No. 7, have excited a natural disagreement among some

of those affected by the proposed changes. The bulletins referred to are as follows:

Publication No. 6: Teachers' Year Book of Educational Investigations.

Publication No. 7: Assignment of Principals, Assistants to Principals and Clerks in Elementary Schools.

Publication No. 8: Assignment of First Assistants in High Schools.

Publication No. 9: Organization of Classes in Elementary Schools.

Publication No. 10: A Report on the Organization of the Board of Education and its Committees.

Publication No. 11: The School and the Immigrant.

I beg to bring to your attention, also, the various references concerning educational progress included in this report.

In conclusion, I report that on June 23, 1915, the Board of Education appointed as Assistant Director of this Division, Mr. Eugene A. Nifenecker.

Respectfully submitted,

ALBERT SHIELS,
Director.

A

ORIGINAL REPORTS OF THE DIVISION OF REFERENCE AND RESEARCH NOT ALREADY PUBLISHED OR RESERVED FOR SEPARATE PUBLICATION

KINDERGARTEN AND ELEMENTARY INSTRUCTION

A. A Report on the Organization of Kindergartens in Large Cities

IN ACCORDANCE WITH THE REQUEST MADE BY A COMMITTEE OF THE BOARD, THE FOLLOWING INFORMATION CONCERNING THE ORGANIZATION OF KINDERGARTEN CLASSES WAS OBTAINED FROM THREE LARGE KINDERGARTEN ASSOCIATIONS AND FROM SUCH CITIES OF OVER 100,000 POPULATION AS ANSWERED THE INQUIRY

	No. of pupils on register (excluding kindergartens)	*No. of kindergarten classes*	*Number of kindergarten classes with registers (a) less than 24; (b) 24 to 35; (c) 36 to 40; (d) more than 40.*				*Total number of kindergarten pupils on register*	*Number of kindergarten pupils to a class*			*Number of hours of kindergarten instruction*		*Salaries of kindergartners*	*REMARKS*
			(a)	(b)	(c)	(d)		*Average*	*Maximum*	*Minimum*	*To pupils*	*By teachers*		
Los Angeles, Cal.	60,364*	?					8,000	?	25	15	3	3	Director $850—$975 Assistant $620—$850	A kindergarten is not established until there are 25 children enrolled. Then there is one teacher. As soon as there are 30 children, there are two teachers.
Oakland, Cal.	25,805	29	—	4	5	20	1,298	45	50 in 2 sessians 30 in 1 session	25 min. for establishing class	3 a. m. 2 p. m.	5	$780—$1200	Kindergarten teachers having only enough pupils for one session are required to assist pupils of primary grades. Each kindergarten has one session per day.
San Francisco, Cal.	48,166	?	—	—	2	5	815	?	45	30	3	4½	$840—$1152	Kindergarten teachers assist in primary grades from 1 to 2.30 p. m.
Bridgeport, Conn.	16,750	12	2	10	—	—	288	24	25—30	—	2	4	$750	
New Haven, Conn.	24,685	91	—	—	—	—	2,500	27	25	20	2½ a. m. 2 p. m.	4½	$450—$750	Two sets of children and one teacher.

Chicago, Ill.	249,475	410	—	3	10	397	16,158	39	55	25	2½ a. m. 2 p. m.	4½	Same as primary schedule *Lower group* $675—$975 *Upper group* $1100—$1550	
Indianapolis, Ind.	29,811	50 35 a. m. 15 p. m.	4	4	2	40	6,888	138	285	12	3	3 a. m. 2 p. m.	Average $70 per mo.	A. M. and P. M. kindergartens are attended by different classes.
Louisville, Ky.	25,589	33	3	21	8	1	1,053	32	40	25	3⅙	3⅙	$500—$800	Kindergartners spend 4 to 6 hours per month visiting homes or teaching such subjects as music, sewing, etc., where it is desired by principals.
New Orleans, La.	43,590	42	4	10	3	25	—	—	No rule for minimum and maximum. The average is 1 teacher to 20 pupils in attendance.	The type kindergarten is one of 2 teachers with 35 to 45 pupils.	3	4	$50 to $85 per mo. same as other teachers	In lieu of ungraded classes, etc., teachers devote at least one hour per day in giving instruction to such children.
Baltimore, Md.	72,944	23	—	2	3	18	1,145	50	80	31	3	3	Teacher $600 Asst. $400	There are 19 single kindergartens and 119 double kindergartens.
Boston, Mass.	103,701	138	The quota of pupils to a teacher is 25. For an excess of 15 pupils continuing 1 month an additional teacher may be appointed. For a deficiency of 15 pupils continuing 1 month a teacher may be removed. When the number of pupils is over 30 yet not 40 in attendance a special assistant may be assigned. Whenever the number of pupils in attendance entitles a kindergarten to 4 teachers it may be reorganized to consist of 2 kindergartens each with a first assistant.					6,764	49	83 3 trs.	25	3 a. m. 2½ p. m. (There are only 12 p. m. kindergartens)	3 a. m. 2½ p. m.	First asst. $672—$1032 Asst. $480—$864	

* Including evening elementary.

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			(a)	*(b)*	*(c)*	*(d)*		*Average*	*Maximum*	*Minimum*	*To pupils*	*By teachers*		
Fall River, Mass.	14,736	7	—	—	—	7	446	64	90	51	2¾	2¾	Princ. $700 Asst. $620	
Worcester, Mass.	21,000	38	6	16	5	11	—	—	54	14	2¾	2¾	$550 to $850	Helpers are assigned if classes exceed 35.
Cambridge, Mass.	12,863	17	1	6	—	10	705	41	54	21	2¾	2¾	Head $576—$996 Asst. $504—$864	There is no rule in regard to minimum and maximum number. When the average of a class exceeds 25, an assistant is employed.
Grand Rapids, Mich.	15,305	67	20	39	5	3	2,384	36	93	9	2½ a. m. 2¼ p. m.	4¾	$450—$550	
St. Paul, Minn.	27,000	75	12	27	25	11	3,000	40	64	8	2	4	Asst. $500—$750 Director $750—$1000	

St. Louis, Mo.	67,845	168	—	—	—	—	9,433	56	—	—	3 a. m. 2 p. m.	Some teach half a day; others a whole day	Dir. whole day $920—$1120 Dir. half day $700—$760 Asst. whole day $640—$700 Asst. half day $400—$480	"45 pupils shall entitle the director to one paid assistant. She shall be allowed an additional paid assistant for each 30 pupils over 60." All day kindergartners teach two different classes.
Kansas City, Mo.	41,296	74	2	13	3	56	3,846	52	96	21	3	3 to 6	$30, $45, $60, $65, $70, $75 per month	It is the policy to keep the number of children per teacher 45 or less. When the number exceeds 45, a helper is employed at $30. In some of the large schools where the teacher has two classes, one in the morning and one in the afternoon (6 hrs.) they are paid $100 per month as a maximum.
Omaha, Neb.	—	—	1	8	13	20	1,535	—	30	15	4 all day 2¾ a.m. 2¼ p.m.	—	$500—$1000	There are two teachers in rooms where the number is over 35. We divide the school where tne number is 60 or over.
Jersey City, N. J.	37,245	12	9	3	—	—	240	20	27	11	3 a. m. 2 p. m.	5	$600—$1200	
Paterson, N. J.	22,000	27	—	—	—	20	1,238	46	No limit	No limit	4 in some 5 in others	4 to 5	$475—$850	
Newark, N. J.	53,365	102	"It is our purpose to organize classes so that there will be a teacher to each 30 enrolled; an average attendance of 20 to 25 for each session."				7,075	69	100	70	2½ a.m. 2 p. m.	4½	$580—$1100	Kindergartners are required to teach two classes—morning and afternoon. These classes are composed of different pupils.

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			(a)	*(b)*	*(c)*	*(d)*		*Average*	*Maximum*	*Minimum*	*To pupils*	*By teachers*		
Albany, N. Y.	11,534	26	7	12	4	3	733	28	45	16	2½	5	$500—$800	Teachers spend 5 hours in school—2½ hours in study and preparation of the next day's work.
Rochester, N. Y.	22,861	92	—	—	—	—	4,521	25	—	—	2½	5	$500—$950	Each teacher has two classes a day.
Syracuse, N. Y.	16,275	61	23	21	6	11	1,825	30	—	10	2¼ 1¾	2¼ 1¾	$400—$750	Classes under 25 pupils are taken care of by one teacher; for more than 25 pupils two teachers are assigned.
Cincinnati, O.	43,089	59	—	14	3	42	3,096	53	91 (3 teachers)	29 (1 tr.)	3 a. m. 2 p. m.	5	Director $600—$1000 Assistant $500—$600	The 5 hours includes visits to homes, assisting in primary classes, etc.
Cleveland, O.	75,772	88	under 60—10 classes above 60—78 classes				7,084	81	—	45	2	4	Director $550—$1000 Assistant $550—$700	Classes must register 60 or more to have an assistant.

Columbus, O.	27,037	4	—	—	1	3	183	46	—	—	3	3	Head tr. $500 Asst. $250	
Dayton, O.	13,288	19	—	—	—	19	1,061	28	46	20	2¾ a. m. 2¼ p. m.	5	$500—$800	Pupils in morning and afternoon sessions not the same.
Toledo, O.	28,000	76	—	—	—	—	3,000	—	15	—	2½	4¼	$500—$1000	Pupils in morning and afternoon sessions not the same.
Philadel'a, Pa.	177,863	—	—	—	—	—	8,146	—	25	20	3	3	$600—$800	
Pittsburgh, Pa.	65,393	202 trs.	3	10	8	75	7,459	36	80 2 teachers	17 2 trs.	2¾	2¾	Director $65—$90 Asst. $50—$60 per mo.	
Scranton, Pa.	21,485	30	4	19	7	—	930	31	40	16	3	3	$495—$660	
Providence, R. I.	28,017	95	5	90	—	—	2,680	27	34	21	2½ a. m. 2 p. m.	4½	*Trs. employed 1 session—* Asst. $550 Teacher $625 *Trs. employed 2 sessions—* $800	No children attend two sessions per day.
Richmond, Va.	19,537	15	20—30—2 classes 30—40—9 classes over 40—4 classes				753	50	63	39	3	3	Director $450—$585 Asst. $360—$495	
Seattle, Wash.	29,251	—	—	—	—	—	783	—	25	18	2—2½	4½	$900—$1110	Children have one session daily. Teacher teaches both sessions with different groups of children.

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			(a)	(b)	(c)	(d)		*Average*	*Maximum*	*Minimum*	*To pupils*	*By teachers*		
Milwaukee, Wis.	44,668	132	Less than 50— 5 classes 50—70 52 classes 70—80 38 classes 80—100 26 classes 100+ 10 classes				4,711	36	48	29	3 a. m. 2 p. m.	5	$540—$960	
New York Kg. Assn.	—	26	—	—	—	26	1,344	52	60	50	3 a. m. 2½ p.m.	3	Principal $700—$1250 Assistant $550—$700	All the kindergartens are organized with a principal and an assistant kindergartner. 25 is the usual number of children to a teacher, although there may be less.
New York Kg. of the Children's Aid Society	—	22	—	15	7	—	805	37	40	30	4	5 (1 hr. for manual wk. with grade pupils)	$480—$780	Teachers give 5 hours instruction twice or three times a week. When not employed with grade children the extra hour is used in preparing their work.
Brooklyn Free Kindergarten Society	—	20	—	1	1	18	1,057	53	—	—	3	3	Director $600—$800 Assistant $450—$500	The number of pupils to a class varies with the number of practice students from training schools in addition to paid kindergartners.

The following cities have no kindergartens: — Atlanta, Ga....."This kind of work is done by private individuals. The public school work of Atlanta begins with the [child after six years of age."
Portland, Oregon.
Nashville, Tenn.
Spokane, Wash....."Many of our primary teachers have kindergarten training. The kindergarten spirit prevails. Spokane installed kindergartens precipitately and generally a few years ago; there was a reaction and they were thrown out. The City has not yet recovered from the reaction."

B.—The Rating of Teachers by 110 Principals in Ten Hypothetical Cases

I. CONDITIONS OF THE EXPERIMENT

One of the most important problems to be met by supervisory officials is that of judging the efficiency of the teachers in their charge. Questions affecting the welfare of the school are dependent upon this judgment as to a teacher's efficiency. The teacher's appointment, promotions, increase in salary, etc., are likewise based upon it. The methods employed in rating teachers are being criticised. Supervisors and administrators are realizing that the "general impression method" is uncertain and inaccurate.

In New York City teachers are rated in instruction and discipline each term by the principal and once a year by the district superintendent. A five letter system is employed, as follows: A, excellent; B+, very good; B, good; C, fair; D, deficient. Under "instruction" are included "teaching ability", "scholarship" and "effort". The term "discipline" embraces "personality," "control of class" and "self control."

During the past school year the question of teachers' ratings has been considered by the local educational authorities and teachers' organizations. Dissatisfaction has been frequently expressed with our system of ratings. Frequently the criticism has been directed not only against the method now in vogue but against all ratings.

It has been stated that definite standards and scales for measuring work have not been devised. Therefore, there can be no uniformity, and without uniformity ratings are relatively worthless. Secondly, it has been affirmed that even were objective standards devised, yet as the conditions under which teachers work are not identical, such standards could not, with justice, be adopted.

The suggestion has frequently been made that in place of our present five mark system, a two mark system of "satisfactory" and "unsatisfactory" be employed. The Committee on Elementary Schools, in order to ascertain whether there was "sufficient

agreement in the standards of the different principals as to warrant the continuance of the present system," directed this Division to prepare a set of hypothetical cases of teachers to be submitted to various principals for rating in instruction and discipline. These are given in the following paragraphs:

II. DESCRIPTIONS OF THE TEACHERS TO BE RATED

In preparing the descriptions it was realized that the portrayal of an imaginary teacher for purposes of rating could but inadequately supply all the necessary data which under actual school conditions are afforded by personal contact and direct observation. Many important phases of a teacher's work and character, and many conditions that in actual practice tend to modify ratings, were of necessity omitted.

The attempt was made to portray concrete examples of teachers more or less typical, in whom probably certain qualities would stand out prominently or be conspicuously absent. The comment upon the descriptions, on the part of principals heard from, would imply that the attempt was successful, many of them declaring that the descriptions fitted closely types to be frequently found in the schools. No unusual types were described. The descriptions are as follows:

CASE 1. (Permanent license. Experience 5 years. In one school since appointment.)

This teacher is a woman of high-strong nervous temperament who has been absent frequently for short periods because of nervous conditions.

There is a state of high tension between the class and herself. She finds fault frequently and in addressing her pupils her voice becomes high pitched. She not infrequently loses her temper, and her whole manner towards children is an irritating one.

This teacher is well read and a good student. She makes constant effort at self improvement and is taking extension courses both academic and professional.

In teaching she shows considerable mastery of the subject matter, but limited skill in presentation and questioning and use of objective illustration. Of particular merit is her thoroughness in drill. Her pupils excel rather in formal subjects such as spelling, work in mathematical exercises, recitations depending on memory, as map work, dates, etc. On the other hand, the class in its recitations shows little appreciation or understanding of anything not immediately on the surface. The pupils seem to take no particular pleasure in what they are learning; compositions for example are well written and carefully spelled, but in their content show no interest or desire on the part of the pupils for personal expression.

When the children are under her charge, order is satisfactory. She makes few complaints against the pupils, but on such occasions the complaints seem to be animated by a strong sense of personal dislike; she cannot apparently adopt an impersonal attitude when dealing with pupils. When the class is not under her immediate supervision, as during her absence or in the halls and during dismissals, it is frequently reported for disorder. The teacher is accurate and painstaking in keeping records and reports. She manifests no disposition towards initiating activities in co-operation with other teachers, but she does co-operate when directed.

CASE 2. (Seven years a teacher with permanent license; the last two years in one school.)

He is a man of robust physique, vigorous and forceful in character and personality. He possesses initiative and self reliance as evinced by his ability and independence in originating and carrying out ideas in the field of athletics in which he is particularly intersted.

He is well read, well spoken and intelligent. As a teacher he is skillful when he desires to make the effort, especially in the presentation of his subject. He has a large fund of narrative and anecdote, the results of a varied and active experience, and from this he draws largely when teaching pupils.

On the other hand, his work shows lack of any preparation, his term plans being fragmentary, incomplete or only in mere outline. In many instances no provision is made for activity to be contributed by the children themselves. The teacher does most of the talking while the children listen interestedly but passively. The lessons in history, geography, etc., are conducted as lectures of a rather interesting type. He rarely requires written work, and when he does, he seldom inspects or corrects it. Any routine of school procedure, such as correction of papers, is particularly irksome to him, and he avoids routine whenever possible.

In one subject, however, he excels; that is in physical training and athletics in which he is active, and in which he shows considerable ability in planning, organizing and executing. His success in this subject shows that the trouble with him throughout is not that he is incompetent but that he is disposed to give attention only to whatever he finds vital or interesting to himself. In class tests conducted by the principal, the rating of the pupils as a rule is fair only. In does not improve through the term, and in a great majority of cases is rather below that of other teachers.

His control of the class is excellent and he has great influence over the children. He understands the boys, readily gains their confidence, is interested in their lives after school, and has helped them to obtain employment after graduation.

He is inaccurate in his records and reports through carelessness and indifference. He is indolent, rarely punctual, neglectful of yard duty, and never on time in handing in reports. Excepting in athletics, he seems to display no enthusiasm whatever in his work as teacher.

He is not susceptible to suggestion, and when he receives criticism from the principal he either treats it with indifference or resents it aggressively. His whole interpretation of his function seems to have in it no conception of loyality to the staff as a whole or co-operation with it. It is an individual interpretation entirely.

CASE 3.

1. Promotion license.

2. Experience—eight years in public school.
3. Grade—8A departmental. Subjects: Grammar, Composition, Spelling.
4. Record of attendance—Absent.....0.
   Late.....0.
5. Reports, records, etc.—Promptly handed in, accurately kept.
6. Prompt at yard duty and other assignments.
7. Conducts debating and dramatic societies and supervises publication of school newspaper.
8. Class absence—less than 10%.
   Class lateness—negligible.
9. Percent of pupils in his classes deficient at the end of each month (his own tests).

Subject	8B¹			8B² (Slower Group)			8A¹			8A² (Slower Group)		
Month	1st mo.	2d mo.	3d mo.	1st mo.	2d mo.	3d mo.	1st mo.	2d mo.	3d mo.	1st mo.	2d mo.	3d mo.
Gram.	30%	30%	25%	50%	40%	30%	25%	20%	20%	40%	30%	30%
Comp.	40%	30%	20%	50%	40%	40%	30%	25%	25%	40%	30%	30%
Spell.	20%	10%	10%	40%	30%	25%	15%	15%	10%	20%	20%	20%

10. Mid-term examinations by principal;

Average ratings attained	8B¹	8B²	8A¹	8A²	7B¹
Gram.	60%	55%	68%	53%	65%
Spell.	88%	82%	91%	85%	86%

11. Data from numerous class observations:
    a. Physical condition of room..... { Ventilation, light,, etc.—excellent.
    b. Control of class—good..... (excellent class management) { Definite plan of entering, seating, passing material, etc.
    c. Preparation of work..... { Uniformly excellent; plan-books made out carefully and in detail.
    d. Mastery of subject matter... { Excellent as shown by organization in presentation and in questioning.
    e. Presentation of lessons..... { Excellent—involving definite aim, motive, illustration, use of blackboard, proper questioning, etc.

CASE 4. Temporary license; one year's experience.

A man of slight build, pleasant and apologetic manner, suggesting earnest desire to please. His voice is weak and gives the impression of corresponding weakness in action.

In teaching he shows a lack of knowledge of elementary subjects, such as American History, and very little acquaintance with the literature of teaching procedure.

His methods are poor; he dictates notes; he uses the blackboard but rarely, and then only to write material for copy; he uses the text-book only for oral reading and makes no provision for teaching pupils how a text-book should be used; he teachers spelling by oral drill exclusively; he teaches facts to be memorized only by concert recitations.

On the other hand he is earnestly endeavoring to improve and is grateful for criticism and suggestions. He tries to apply such suggestions, though he lacks judgment. Thus when the danger of oral spelling was pointed out, he abandoned all oral spelling; when the frequent concert recitations were disapproved, he hesitated to have class singing. From his conversation, however, it is easy to infer that his literal interpretation is not due to lack of intelligence, but to ignorance of teaching and to uncertainity.

He co-operates joyfully with his fellow teachers, and is always willing to do all he can. He is prompt in performing yard duty and other special assignments. His reports are accurately compiled and promptly rendered.

His control over the class is poor, but this seems in large measure to be due to lack of knowledge of class administration as in matters of dismissal, distribution of material and supplies, giving of clothing, etc. The pupils are well disposed towards him.

He spends many hours after school in striving to aid backward pupils.

CASE 5. Temporary license; two years' experience only.

This teacher is a woman of attractive personality, enthusiastic and tactful.

She is not a student, and when she began to teach, her technical equipment was meagre and her scholarship limited. Since entering school, however, she has attempted to remedy these defects by attending extension courses.

She is very susceptible to suggestion. She applies suggestions too literally, however. This indicates an inherent inability for independent thought which is further confined by her constant dependence on the plan books of other teachers or of school publications. She contributes little or nothing of her own in method and is not skillful in assembling the ideas of others.

The results of test in her 3A class are, as a rule satisfactory, with few records above the average.

She is very sympathetic with the girls she teaches. They are fond of her and she exerts an excellent influence over them. She is prominent in all the school activities. She is very popular among her colleagues and is always glad to contribute her best efforts towards school activities, as a whole, such as festivals, celebrations and the like.

In all respects she is a thoroughly likable woman, loyal to the school staff and to the pupil body, but of limited intellectual ability.

CASE 6. Temporary license; concluding service of two years in this school.

This teacher is suffering from some physical ailment which has compelled her absence for two prolonged periods, a month during her first year, and three weeks during the first term of her second year's service.

She is a woman of intelligence as shown by the careful organization of her plans, which give evidence of considerable originality. She makes admirable blackboard drawings and gives great attention to school room decoration. In actual teaching, however, she displays little of the initiative or effort shown in making plans or arranging for decoration. She is listless and indifferent. Frequent visits to her classroom have revealed that much of the children's time is given to drawing maps and designs, and to copying words from readers or other text-books.

The tests even of an elementary character give poor results. An experimental series of tests carried on consecutively for five fortnights showed no progress whatever; in some cases an actual falling off.

The pupils, a class of girls, are restless and at times disorderly. Their appearance at assembly is in marked contrast with those from other classes, in posture and appearance. This is the more noticeable as it has been the school policy to adopt a high standard, which as a rule has been observed by the children.

In conference with the principal this teacher's attitude has been in general an argumentative one, involving a counter criticism on the school system, on school administration, on American ideals in education, etc. In these arguments she has shown the results of considerable reading and not a little study. Her main contention is that schools should develop character and not concern themselves with intellectual acquisition. In practice she seems unable either to develop the character of her pupils or to aid them in studies.

Her reports are fairly correct, but dilatory and slovenly in appearance. She seems to have no sense of personal responsibility either for the results of instruction or for the order of the pupils in her class.

CASE 7. Case No. 7 is a teacher of many years' experience who has a striking personality which impresses itself upon all coming in contact with him.

Quiet and mild in manner and voice, he gives one the impression of vigor and power held under control and in reserve. Coldly intellectual and unemotional, his personality is chilling if not repellent to the child.

Very intelligent and of considerable scholarship and technical ability, he is efficiency and accuracy personified in all his relations.

Order of the military type prevails in the room. The children admire and respect him, perhaps fear him, but do not regard him with affection.

Preparation of work upon the part of this teacher is very painstaking and thorough. His presentation is skillful, well organized, showing mastery of subject matter and an excellent technique in teaching In both development and drill work he excels, and the results are commensurately excellent. The children do not, however, seem to be enjoying themselves. they seem under too much restraint.

His disciplinary ability has proven of great assistance in the control of pupils at dismissals, assemblies, departmental changes. His ability as a teacher has been recognized by his associates, to whom he has been a source of much helpful suggestion.

CASE 8. Temporary license; beginning second year's experience.

The teacher at once impresses her associates as a woman of superior type. Notwithstanding her youth, she is a woman of much dignity and polish. She is courteous, considerate and always ready to aid in school activities. Nevertheless, she is rather reticent, and though on friendly terms with all the teachers has become intimate with none.

In the classroom she shows unusual intelligence. During the first month, her ignorance in class administration of routine activities made some confusion, but with a few suggestions she readily overcome this condition. She has already initiated some extremely interesting and novel devices, especially in composition and the content subjects. Drill, however, has not been neglected, and in the tests she has in every case averaged higher than two other teachers of the grade.

She gives evidence of great strength of character. During the second term several known disorderly boys were placed in her class as an experiment. The first week she sent one boy to the principal. The other gave her no trouble. In discussing the case of the boy sent, her attitude was a detached one, free from passion. She suggested several possible reasons for the boy's behavior, such as health, lack of proper parental influence, and the like. When the boy expressed regret, she spoke to him briefly, requested that he be returned to the class and has had no trouble since.

This class has a remarkably fine record for behavior, as excellent during her absence as when under her control. She has inspired them with a fine class pride. Pupils regard her highly, though their affection while free from fear, is tempered by a sort of awe. Nevertheless, pupils in the grades below are anxious to be placed in her class and parents have so requested a number of times.

This teacher gives model reports. Her one defect, if it be a defect, is a certain aloofness, in no sense offensive, and merely the unconscious expression of a personality interested purely in the intellectual and professional aspects of her work, and perhaps indifferent to its social phases.

CASE 9. Concluding her third term of teaching.

No particular striking characteristics. The impressions derived from visiting this teacher's classroom are indicated in the following note:

From data of several visits it is evident that the teacher has made little preparation in the following subjects: word study, history and arithmetic. Class orderly and apparently attending to the teacher, but no genuine interest,—nothing to be interested in.

Word Study: Rules and memoriter statements from text of prefixes and suffixes. No criticism of work done by pupils at blackboard. For example, pupil wrote "sensor, migrator, Interior, anchor" for suffix "or" without correction by the teacher. For a sentence with a word ending in "ness," a pupil wrote the following: "The sweetness of the apple is great." This was refused but the following was accepted: "The sweetness of the apple is good."

History: This was a review. Children had made written lists of American and British victories and of American and British generals. Pupils read aloud from lists. There was no discussion of relative values.

Arithmetic: The teacher stated "We will take up again the development of the subject of customs and duties." The lesson consisted of asking certain questions like the following:

What do you understand by customs and duties?
(answer evidently fom text)
Why only on imported goods?
What kinds of duties are there?
What do you understand by specific duties?

In every case the pupil seemed to be trying to remember the text-book definition, and when given the teacher seemed satisfied.

The teacher's marks in three monthly tests were slightly below the marks in other grades for corresponding subjects.

She has received suggestions without enthusiasm and without argument. She usually states that she will remedy faults in future, but otherwise makes no comment.

The order in the class as a rule is good when the teacher is looking. Otherwise the class is a frequent offender.

The room is unsightly. The teacher allows a basin of water to stand at the window, and she sometimes puts her coat and hat on the chair before time for dismissal. The floor is frequently littered with papers.

Reports are sent as a rule regularly and satisfactorily, but the exceptions are more numerous than with most teachers.

CASE 10. Experience—26 years in New York City.

This teacher has spent most of her professional life in her present school where she is regarded as a fixture. She has a motherly manner and is well liked by the children who frequently gather around her after school hours, in the yard, etc.

She is in no sense a student, her equipment representing an accumulation of experiences, including many devices by which she sets very great store. She is fond, for example when visitors come to the room, of propounding special problems, normally too difficult for her grade, which she has taught her pupils to answer with facility.

In the routine work, however, she is not so successful, although the pupils usually reach the average of accomplishment of pupils in the classes in the same grade. It should be added, however, that she secures some excellent results by drill of the hammer-in type.

Her order is in every way satisfactory. There is some suspicion that recalcitrant boys have had an occasional shaking and that there have been like infractions of the rule prohibiting corporal punishment. Her own pupils, including the ill-behaved ones, are most loyal to her and regard her with genuine affection.

She has done much to encourage young teachers who doubted of their ultimate success. In rare cases in which such teachers have been overcome with hysteria or nervousness, she has been a most valuable aid. Altogether she exercises a most wholesome influence on the teachers and pupils of this school.

III. THE RESULTS OBTAINED

(a) Number of Replies:

The above descriptions were sent to 133 principals; 110 complete replies were received. The rest of the returns were

either incomplete or were received too late to be used. Of the 110 replies received 71 or 64.5% were from men principals and 39 or 35.5% were from women. The proportion of men to women principals was accidental, as no intentional distinction was made.

(b) Summary of Results:

Table I—Ratings given in Instruction and in Discipline

	Instruction						Discipline					
Case	A	B+	B	C	D	Total	A	B+	B	C	D	Total
1	—	7	92	11	—	110	—	3	71	36	—	110
2	—	3	66	41	—	110	18	44	37	10	1	110
3	52	52	6	—	—	110	81	27	2	—	—	110
4	—	1	63	46	—	110	—	1	81	27	1	110
5	—	11	96	3	—	110	30	60	20	—	—	110
6	—	—	13	91	6	110	—	—	8	92	10	110
7	83	26	1	—	—	110	38	64	8	—	—	110
8	74	35	1	—	—	110	91	19	—	—	—	110
9	—	—	30	76	4	110	—	1	57	49	3	110
10	4	30	74	2	—	110	17	76	16	1	—	110
	213	165	442	270	10	1100	275	295	300	215	15	1100

Table I shows the ratings given in all the ten cases, in instruction and discipline. For instance, in the first case, out of the total of 110 ratings in instruction, 7 B+'s were given, 92 B's and 11 C's. No A's were given, nor D's. In discipline, in the same case, 3 B+'s were given, 71 B's, 36 C's, and so on. The last line shows the number of times each rating was given; in the ten cases, 213 A's were given in instruction 165 B+'s, 442 B's, 270 C's and 10 D's In discipline 275 A's were given, 295 B+'s, 300 B's, 215 C's and 15 D's.

Table II—Distribution of ratings by percentages

	Instruction						Discipline					
Case	A	B+	B	C	D	Percent. Total	A	B+	B	C	D	Percent. Total
1	—	6.3	83.6	10.	—	100	—	2.7	64.5	32.7	—	100
2	—	2.7	60.	37.2	—		16.3	40.	33.6	9.1	.9	
3	47.2	47.2	5.4	—	—		73.6	24.5	1.8	—	—	
4	—	.9	57.2	41.8	—		—	.9	73.6	24.5	.9	
5	—	10.0	87.2	2.7	—		27.2	54.5	18.1	—	—	
6	—	—	11.8	82.7	5.4		—	—	7.2	83.6	9.1	
7	75.4	23.6	.9	—	—		34.5	58.1	7.2	—	—	
8	67.2	31.8	.9	—	—		82.7	17.2	—	—	—	
9	—	—	27.2	69.1	3.6		—	.9	51.8	44.5	2.7	
10	3.6	27.2	67.2	1.8	—		15.4	69.0	14.5	.9	—	

Table II shows the same data as Table I, reduced to a percentage basis. This makes comparison easier. For instance, in the first case, in instruction, 6.3% of the ratings were B+; 83.6% were B and 10% were C.

Figure I. Showing the distribution of Ratings in Instruction.

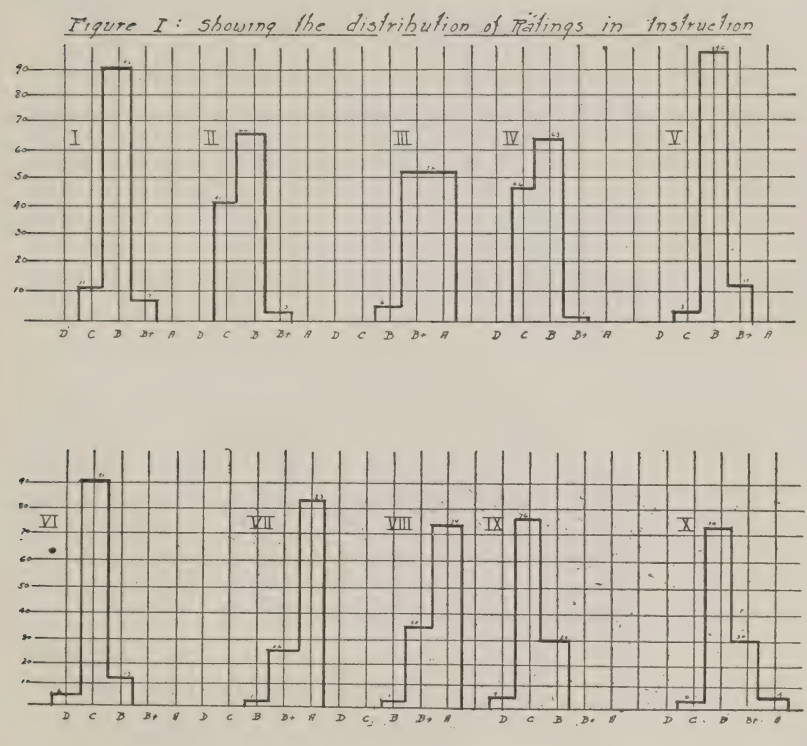

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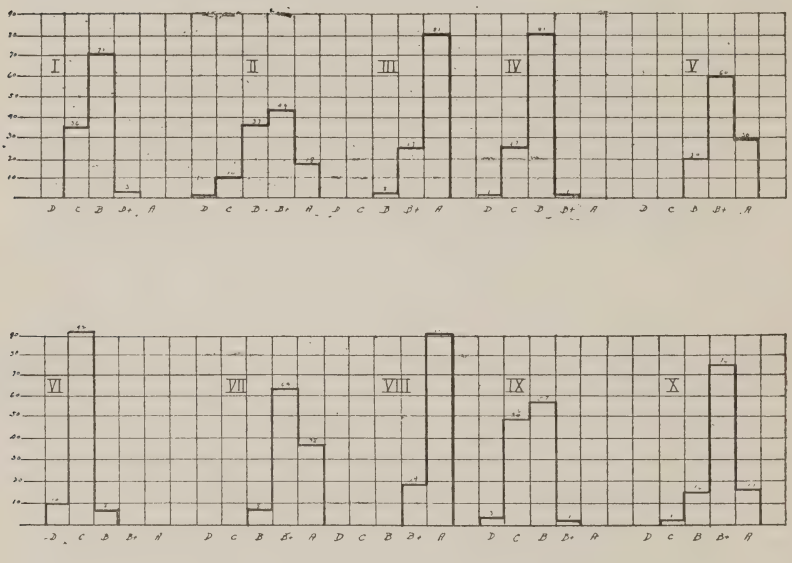
Figure II. Showing the distribution of Ratings in Discipline.



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Figures I and II are graphic representations of Table I. The height of the figures shows the number of ratings of each kind. The ratings A, B+, B, C, D, are indicated on the horizontal lines.

IV. DISCUSSION OF RESULTS

(a) General Factors of Variation:

The rating of teachers is not a simple matter. In the absence of objective standards, subjective standards naturally are used, and as these are largely matters of opinion, it must be expected as a result that variation will be found. Examination of the tabulated data shows, as expected, variation in the ratings given the hypothetical teachers. Is the variation so great in extent as to render worthless the scheme of rating employed?

Such variation may be attributed to the influence of a variety of factors. On the one hand the data contained in the descriptions were naturally interpreted by each principal in terms of his own individual school and his own individual theory or practice. This probably brought into play extraneous factors not in the data, such as conditions in and about the school, character of the children, size of school or classes, etc., amount of supervision or help given. Factors such as these (variable from school to school) could not be included within the limits of a "hypothetical case."

Again, on the other hand, the extent of variation would tend to be less in this experiment than in actual practice. Rating a hypothetical case is different from rating an actual living personality. Ratings are apt to be more exact. The limitation to the data contained in the descriptions, resulted probably in a higher degree of agreement.

In considering this question of variation one must also bear in mind that the intervals or gaps between the respective marks A, B+, B, C or D are not equal. Variations from B to B+, or from B+ to A, or *vice versa,* are not of so much significance as those from C to B or B to C. That is to say, gradations as to the relative excellence of a teacher's service might show lack of agreement. This would be due to the operation of minor factors which might easily cause the fluctuation from A to B+ or from

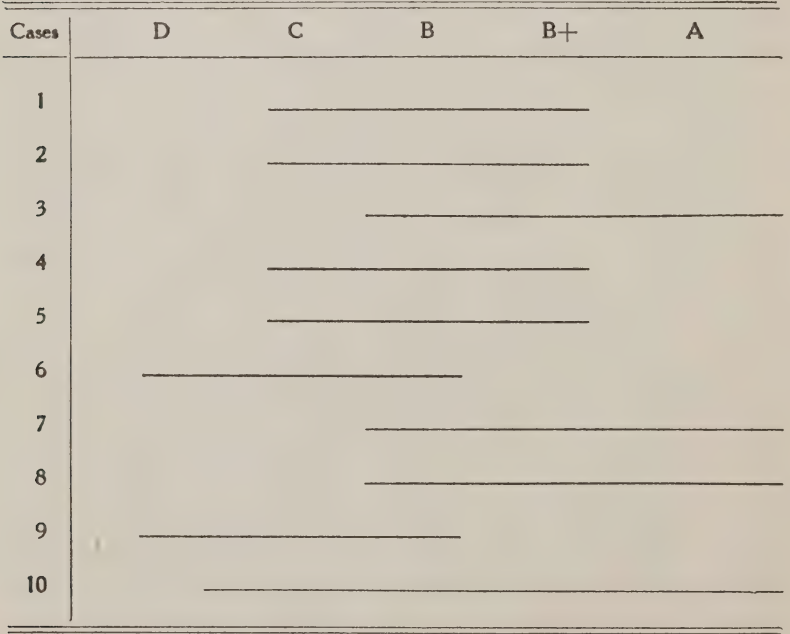
B+ to B, etc., while essentially the same general standards might be held.

On the other hand, the distinction between satisfactory and unsatisfactory services is or should be undoubtedly more clearly defined than that between a B+ and an A. Factors more fundamental should operate here. Hence disagreement as to the satisfactory or unsatisfactory character of a teacher's services evidently indicates fundamental differences in the standards held. Such disagreement would therefore be more significant.

(b) Variation shown by range:

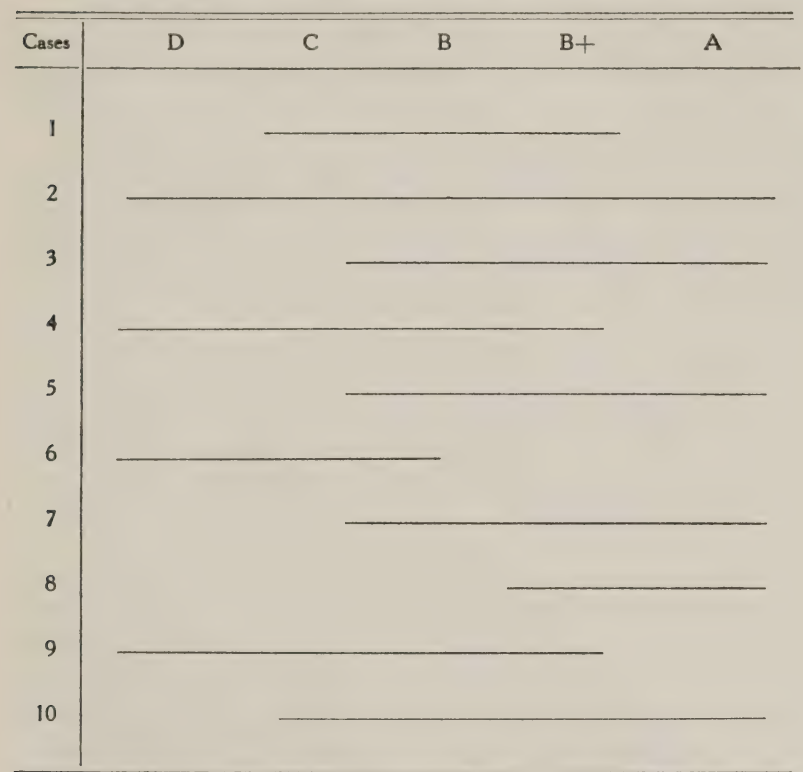
Figure III shows the ranges of variations for each of the cases. In instruction, nine of the cases have ranges of three marks; the tenth has a range of four. This range, if considered alone, would not give an accurate idea of the situation. An extensive range probably was determined by a few extreme ratings. More significant is the fact that in cases 1, 2, 4, 5, 6, 9 and 10 the range includes both satisfactory and unsatisfactory ratings.

Fig. III—Showing Range of Ratings in Instruction



In discipline one of the ratings has a range of two; five, a range of three. Three have a range of four. One has a maximum range of five, viz., from A to D. Here again, five of the cases include within their range satisfactory and unsatisfactory marks.

Fig. IV—Showing Ranges of Ratings in Discipline



(*c*) *A Brief Discussion of the Individual Cases:*

A more detailed examination of the cases will show more concretely the above facts.

Case 1. Here in instruction 6.3% of the ratings were B+, 83.6% B; or 90% were satisfactory, while 10% were C or satisfactory.

In discipline a greater disagreement is shown, 32.7% of the ratings being unsatisfactory to 67.3% satisfactory. This seems rather great. One may account for this either in terms of the standards held or in terms of the data given, that is subjectively or objectively. The data given are clear, definite, presenting no particular complexity of situation, so that the disagreement must be due to the difference in standards.

Case 2. The ratings here show a considerable variation both in instruction and in discipline. In instruction 37.2% of the ratings were C's, while 62.7% were B's or B+'s. This seems excessive.

In discipline eighteen principals gave the rating A, 44 B+, 37 B, 10 C and 1 D. This shows a very great range. At the same time too much significance must not be attached to the great range, inasmuch as the great majority of the ratings, 99 (or 90%), are of the one general character, satisfactory.

Case 3. In case 3 there was practically an even division of opinion as to the relative excellence of the instruction (47.2% A; 47.2% B+; 5.4% B), but it must be noted that there was unanimity in opinion as to the satisfactory character. The same condition was shown in the ratings on discipline. (73.6% A; 24.5% B+; 1.8% B).

Case 4. In case 4 there is presented a *serious* disagreement of opinion, 41.8% of the ratings in instruction being C, while 58% denoted it satisfactory. In discipline there was a wider range from B+ to D, showing some extreme cases, but at the same time a less extensive variation than in instruction, as only 25.4% of the ratings were unsatisfactory to 74.5% satisfactory.

Case 5. Shows instruction receiving 96 (or 87.2%) B ratings to 14 (or 12.7%) ratings of B+ or C. Of these fourteen only 3 (or 2.7%) were C, showing 97.2% or almost perfect agreement as to the satisfactory character of teaching. In discipline a similar condition is to be found. All the ratings were satisfactory. Within this group 54.5% were B while 45.3% differed from this by one step above or below.

Case 6. 11.8% of the principals rated the instruction B to 88.1% rating it unsatisfactory. In discipline 92.7% of the ratings were unsatisfactory to 7.2% satisfactory.

Case 7. Considerable agreement is shown in this case in ratings on instruction, 75.4% with A, to 24.5% with lower but *satisfactory* ratings.

In discipline, too, there is complete agreement as to the satisfactory character of service, although the variation within the limits of satisfactory service was 41.7% (34.5% A; 58.1% B+; 7.2% B).

Case 8. Is similar to case 7. In instruction there is difference of opinion in 32.7% of the ratings from the rating given by a majority of the principals (75.4% A; 23.6%B+; .9% B).

In discipline there is closer agreement, 82.7% giving A and only 17.2% B+. The variation here involves but one step from A to B+.

Case 9. In this case the great majority (72.7%) of ratings were unsatisfactory. 27.2% however rated the instruction satisfactory. This seems to be a high percentage of variation.

In discipline ratings are equally divided between satisfactory and unsatisfactory, 52.7% to 47.2%. The case is clearly defined, without any condition involving possible misinterpretation. The conclusion must be reached that certain data mentioned in the description proved to be the determinant factors with some principals but not with others. In other words standards seem to vary greatly.

Case 10. Less than 2% of the ratings were C, 98% being A, B+ and B, with the majority, 67.2%, falling under B. The C's were two in number, a negligible amount.

In discipline, also, there was essential agreement as to satisfactory service, only one C having been given. Under the satisfactory ratings 69% were B+, and 29.9% are divided between A and B.

Summary. Neglecting the variations as to degrees of excellence or inferiority and confining our attention to the more

significant difference of opinion as to the character of service, whether satisfactory or unsatisfactory, we find in the ratings of instruction the following percentages for each:

	Unsatisfactory	*Satisfactory*
Case 1	10.0%	90.0%
Case 2	37.2%	62.7%
Case 4	41.8%	58.1%
Case 5	2.7%	97.2%
Case 6	88.1%	11.8%
Case 9	72.7%	27.2%
Case 10	1.8%	98.1%

In the other cases the ratings were either exclusively satisfactory or exclusively unsatisfactory.

In discipline the difference of opinion as to satisfactory or unsatisfactory service is shown by the following:

	Unsatisfactory	*Satisfactory*
Case 1	32.7%	67.2%
Case 2	10.0%	90.0%
Case 4	25.4%	74.5%
Case 6	92.7%	7.2%
Case 9	47.2%	52.7%
Case 10	.9%	98.1%

(d) Variation Shown by Deviation from Assumed Average Ratings:

The ratings A, B+, B, C and D are relative and are separated by qualitative intervals. It is difficult or impossible to find an average of the above as such average would fall within some interval, between two ratings. To make possible a measure of the deviations from a central tendency in the ratings, the ratings have abitrarily been given the following weights as estimate of their relative importance: A, 5; B+, 4; B, 3; C, 2; and D, 1. It is recognized that objection may be made to such weighting, but by using these values, averages and deviations may be computed. Table III gives the computed average rating in instruction in each case, the average deviation and the coefficient of deviation. Table IV gives similar data for the ratings in discipline.

Table III—Deviation from the Average Rating in Instruction

Case	*Arithmetical average*	*Average deviation*	*Coefficient of deviation*
1	2.964	.193	.068
2	2.654	.488	.184
3	4.418	.550	.124
4	2.591	.494	.190
5	3.072	.184	.059
6	2.063	.220	.107
7	4.745	.393	.083
8	4.663	.453	.097
9	2.236	.416	.186
10	3.327	.488	.146

NOTE:—Cases 2, 4, 6, 9, 10, it will be noted, show the greatest deviation.

Table IV—Deviation from the Average Rating in Discipline

Case	*Arithmetical average*	*Average deviation*	*Coefficient of deviation*
1	2.700	.458	.169
2	3.618	.757	.208
3	4.718	.415	.088
4	2.745	.398	.144
5	4.091	.496	.121
6	1.981	.179	.090
7	4.272	.502	.117
8	4.827	.286	.059
9	2.509	.535	.213
10	3.991	.324	.081

NOTE:—In discipline the ratings given in cases 1, 2, 4 and 9 show the greatest deviation.

(*e*) *A Comparison of the Ratings Given by the Women Principals with those Given by the Men Principals:*

Such a comparison reveals several interesting facts. Table V is an analysis upon this basis of the ratings in instruction. The figures were reduced to a percentage basis for easier comparison. The ratings in discipline similarly are shown in Table VI.

Table V—Ratings of Men and Women Principals Compared —Instruction

	A		B+		B		C		D	
Case	*Men*	*Women*	*Men*	*Women*	*Men*	*Women*	*Men*	*Women*	*Men*	*Women*
1	—	—	7.0	5.1	81.6	87.1	11.2	7.6	—	—
2	—	—	4.2	0.0	53.5	71.5	42.2	28.2	—	—
3	52.1	38.4	40.8	58.9	7.0	2.5	—	—	—	—
4	—	—	1.4	0.0	57.7	56.4	40.8	43.5	—	—
5	—	—	9.8	10.2	88.7	84.6	1.4	5.1	—	—
6	—	—	—	—	15.4	5.1	78.8	89.7	5.6	5.1
7	67.6	89.7	30.9	10.2	1.4	0.0	—	—	—	—
8	59.1	82.0	39.4	17.9	1.4	0.0	—	—	—	—
9	—	—	—	—	28.1	25.6	67.6	71.8	4.2	2.5
10	0.0	10.2	28.1	25.6	71.8	58.9	0.0	5.1	—	—

NOTE:—The data have been reduced to points.

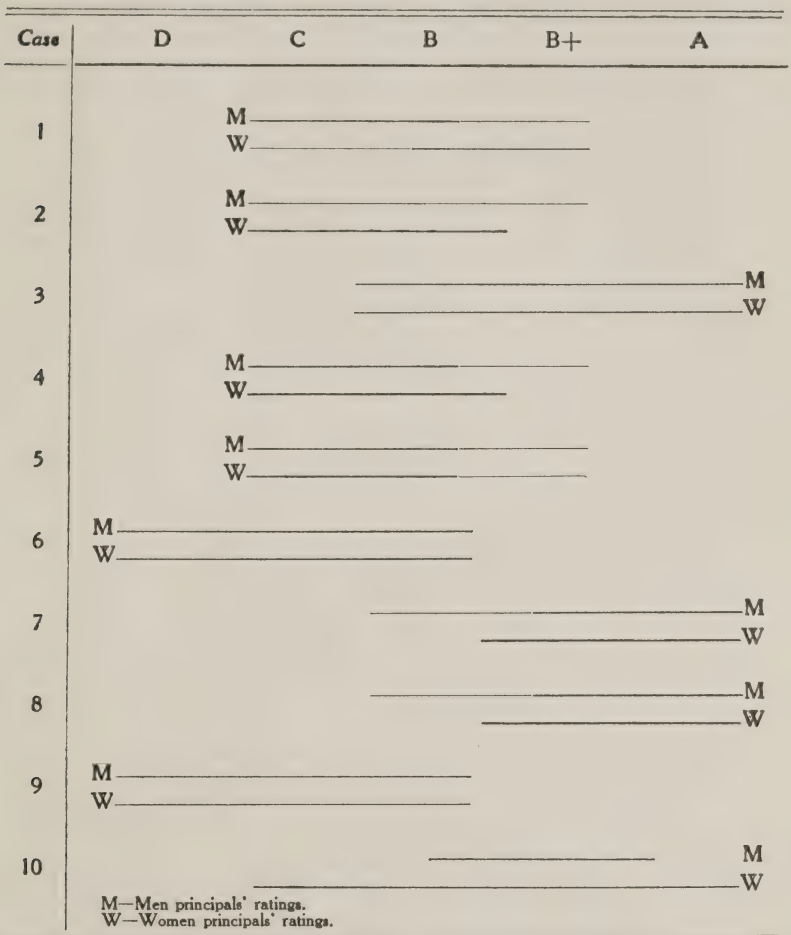
Table VI—Ratings of Men and Women Principals Compared —Discipline

	A		B+		B		C		D	
Case	*Men*	*Women*	*Men*	*Women*	*Men*	*Women*	*Men*	*Women*	*Men*	*Women*
1	—	—	4.2	0.0	61.9	69.2	33.8	30.7	—	—
2	19.7	10.2	43.6	33.3	26.7	46.1	8.4	10.2	1.4	0.0
3	73.2	74.3	23.9	25.6	2.8	0.0	—	—	—	—
4	—	—	0.0	2.5	74.6	71.8	23.9	25.6	1.4	0.0
5	25.3	30.7	59.1	46.1	15.5	23.1	—	—	—	—
6	—	—	—	—	9.8	2.5	80.3	89.7	9.8	7.6
7	35.2	33.3	56.3	61.5	8.4	5.1	—	—	—	—
8	80.3	87.1	19.7	12.8	—	—	—	—	—	—
9	—	—	1.4	0.0	54.9	46.1	39.4	53.8	4.2	0.0
10	18.3	10.2	63.3	79.5	18.3	7.7	0.0	2.5	—	—

NOTE:—The data have been reduced to points.

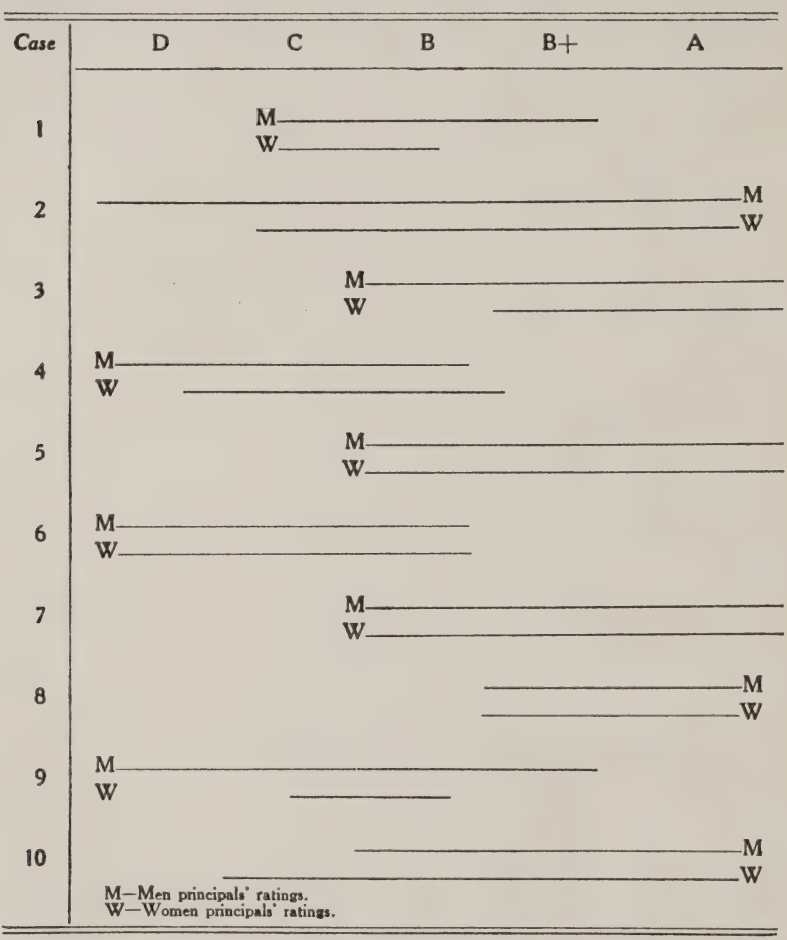
Do the women principals show greater variation or greater agreement in their ratings than the men? Examination of the data in Table V shows that in instruction their ratings show a greater degree of agreement in cases 1, 2, 3, 6, 7, 8 and 9, while the same is true for the men in cases 4, 5 and 10. As shown in Figure V the range of ratings among the men is three intervals in nine cases, with a range of two for the 10th case. Among the women, in four cases the range is only two intervals or ratings, in five cases it is three and in the tenth case it is four.

Figure V—Showing Ranges in Ratings of Women and Men Principals—Instruction



In discipline (Table VI)., the men show greater variation in cases 1, 2, 3, 6, 7, 8, 9 and 10. In seven cases the range of ratings of the men, as Figure VI shows, includes three intervals or ratings; in one, 2 ratings; in one, 4 ratings, and in one, 5 ratings. The ratings of the women show a narrower range, in four cases including only two ratings or intervals, in four cases, 3 ratings; and in the two remaining cases, 4 ratings.

Figure VI—Showing Ranges in Ratings of Women and Men Principals—Discipline



(*f*) *Conclusions*:

The results of this investigation show that the ratings A, B+, B, C and D have a varied significance for different individuals; that even in the distinction between satisfactory and unsatisfactory there is little agreement of opinion shown.

Modification of the system of rating from the five-mark scheme now employed to the two-mark system suggested of satisfactory or unsatisfactory, would not insure the desired uniformity, as is indicated by the lack of agreement shown in this two-fold distinction in the ratings.

Assuming the desirability for some method of ratings, a question which was not within the field of this investigation and which this report therefore does not discuss, it seems that the data presented show the necessity of some more detailed analysis of the teacher's function.

In such analysis and definition of the elements of the teaching process alone can a basis be found for any scheme of rating, the units of which will mean the same thing to different individuals. The elements then that enter into the rating scheme will have clear and significant content. Such analysis is actually made in practice by each individual principal for himself, the moment particular qualities or phrases are subsumed under the terms instruction and discipline. The variation, however, in value and character of what is so subsumed, due to the individual element involved, is the cause of the lack of uniformity.

Appendix I contains the remarks made by the principals in comment, either on the descriptions sent them or in explanation of their ratings. Such comments show, to a certain extent, the difference in standards. It is to be noted that in some cases the comments are contradictory. In other cases, the same comment was made in substance by several principals who, however, gave very different ratings.

Appendix II contains the remarks made by principals upon the question of teachers' ratings in general.

APPENDIX I—COMMENTS MADE BY PRINCIPALS IN RATING TEACHERS

Case 1

No. of Prin. making in substance the comments listed below	and rating as below
4 Better physical conditions would contribute to correction of some of these weaknesses and difficulties....	2-BB 1-BC 1-CC
12 Stop taking courses till health is recovered.....	5-BB 7-BC
6 Leave of absence to improve nerves.....	4-BB 1-BC 1-CC
2 Loss of temper, irritating manner justify the C.....	BC
2 Weaknesses are those of personality, a factor in discipline..	BC
5 Temperamentally and physically unfit.....	3-BB 1-BC 1-CC
2 Would be helped by change of school.....	BB
3 Attitude to be changed.....	2-BB 1-BC
1 Passable; lower mark when up for salary increase.....	BB
1 Poor voice—petty—lack of self control—purely formal work—fails to arouse interest—fails to develop thinking powers. Advise care of health; giving up courses.....	BB
1 Instruction should secure a life interest in work; aim of discipline is self control.....	CC
1 Results mechanical; discipline neurasthenic.....	CC
1 Does not inspire work, is mechanical.....	BB
1 Latent capabilities.....	BB
2 Skill in presentation and questioning may be developed, evidently needs help.....	BC
1 Poor presentation, questioning and illustration, but thorough in drill.....	BC
1 Not a failure in instruction. Discipline does not help in formation of character.....	BC
1 Limited skill in presentation and in use of objective illustration; self-control not developed.....	BB
1 Lack of co-operation and self-control; class discipline not based on self-control of pupils.....	BC
1 Discipline not secured through interest or sympathy.....	BB
1 Earnestness saves her from unsatisfactory mark. Has no love for children and should not be in profession....	BB
1 Well intentioned, hardworking mediocrity.....	BB
1 Unskillful, uncontrolled, indifferent results.....	CC
1 Will scarcely rise much higher.....	BB
1 This B would be a low B.....	BB

Case 2

No. of Prin.	making in substance the comments listed below	and rating as below
4	Does not live up to his natural abilities or possibilities.	3-BB+ 1-BC
3	Capable but indolent; laziness prevents higher marks.	2-BB 1-CA
1	Principal should not permit indolence, carelessness, and lack of punctuality	BA
1	Poor results; lack of effort	CB
1	Should be rated for what he does, not for what he is capable of doing	CB+
1	Lack of effort and self-control	BB+
1	Evidently the making of a good teacher	BB
1	A type we usually overrate	B+B+
2	If persistently negligent would request that school be relieved of teacher	CC BB
3	A few C's will cure him	BB+ CC CB
1	Dangerous	BC
1	Demand improvement	BB
1	Assuming principal has labored with him	CB+
3	Insist on complete plans and preparation	2-BB 1-BB+
1	Should receive lower ratings if no improvement is shown	BA
2	Weaknesses should have been corrected earlier in career	BB
5	Lacks self-discipline—poor school ideals and loyalty	2-BB 2-BC 1-CB+
1	Selfish—lacks conscience	CB
1	Indolent as to method, but has permanent disciplinary influence	BA
1	Personality of teacher lowers mark	BB
1	Attitude toward criticism	BB
1	Try other work	CB+
18	Specialize in physical training either as special teacher, departmental teacher, or teacher in high school, etc.	3-CC 1-CB 4-CB+ 1-CA 2-BB 5-BB+ 2-BA
1	Faulty assignment	BB+
1	If teacher in departmental—AA	BA
1	If teacher of athletics only, would rate him higher	CB
1	Instruction in studies primary	CB+
1	Athletics versus class teaching	CB
3	Athletics not all of it, etc	2-CC 1-CB+
1	Work in athletics raises ratings	BA
1	Value to system is B+ if influence on children is a positive one	BB+

No. of Prin.	making in substance the comments listed below	and rating as below
1	Influence on boys doubtful	CC
1	Influence on boys good; should have charge of physical training and athletics	BA
1	Influence on boys merits B+ in spite of laziness	BB+
1	Influence on other teachers demoralizing	CB+
1	Unjust to pupils—should teach work thoroughly	CB+
1	Does not know the intellectual status of pupils	BB+

CASE 3

1	Ratings recorded mean little unless one is familiar with causes and conditions	AA
1	Benefit of doubt given	BB
1	Not sufficient attention to drill	B+B+
2	With development of power of drill, would make an AA teacher	B+B+ B+A
1	Cannot drill; examination results too low	B+A
3	More attention to drill; too much time to externals	2-B+B+ 1-BA
1	If tests show deficient drill work, should give B+ for instruction	AA
1	Low ratings could and should be corrected	AA
1	Too great a percentage of deficiencies; lack of individual effort	B+A
1	Methods better than results	B+B+
1	Consistent, dependable, progressive	AA
1	Lacking judgment, drill, application	B+A
3	Results in tests do not show the highest standard in instruction, but this is an excellent teacher	B+A
1	Represents an average type. Excellent along stereotyped lines; no superior excellence	B+B+
1	An acquisition	AA
1	A rare teacher. Average ratings count for little especially in grammar	AA
1	Very puzzling	B+A
1	Teacher too much slave of system—children are not inspired	B+A
1	If pupils are inspired to do some higher work, this is an excellent teacher	AA
2	Superior—would be an excellent supervisor	AA
1	Inability to rouse children's activity cause of failures —a matter of discipline	AB+
1	Character building more important than scholarship	BA
1	What importance shall be attached to principal's test?	AA
1	General improvement a test of ability	AA

CASE 4

4	Should not teach	CC
1	Should not have been licensed	CC
1	Should choose other work. "Is sissified"	CC
1	Poorly qualified	CB
1	Has to be tolerated	BB

No. of Prin.	making in substance the comments listed below	and rating as below
1	Weak personality	CB
1	Man is dazed; needs help	CC
2	B in discipline because of attitude of pupils	CB
2	Rating should be lower, but has had only one year's experience	BB
1	Discipline mark lenient owing to inexperience	CB
2	If his experience had been longer, his mark in instruction might have been lower	BB
1	One year too short a time to decide merits	BB
3	Faults due to inexperience; will become a good teacher.	1-BB 1-CC 1-CB+
2	Inexperienced; therefore hopeful	BB CB
1	Even experts had to learn	BB
1	Were this teacher not a beginner his ratings would be CC. His willingness to learn and eagerness to work, and pupils' attitude, make him promising material.	BB
1	Willingness to receive instruction and give afternoon service deters me from marking him D in instruction	CD
1	Willing attitude and likelihood of improvement precludes advisability of C	BB
1	Willingness to be taught gives promise of better things	CB
2	Inexperience plus willingness	BB
1	This sort gets too much sympathy because of his willingness	CB
2	Marked C but would recommend renewal of license because of effort	CC CB
1	Hopeful case	CB
1	In judgment and teaching C, but co-operation and earnestness A; hence B average	BB
1	Beginner, will succeed under guidance	CC
6	With proper guidance and supervision will improve	4-BB 1-CB 1-BB+
4	Needs direction and experience; possibilities good	BB
1	Because he needs constant guidance	CB
3	Needs bolstering—to be taught how to work—hopeful case	2-BB 1-CC
4	Needs help and encouragement—extension courses	BB
6	Possibilities of improvement	2-BB 1-CB 3-CC
1	Promises to become a very good teacher	BB
1	Will never rise above mediocrity	CC
1	Could be strengthened	CB
1	Unsatisfactory—marked B because promising	BB
1	C in discipline if no improvement is seen	CB
2	Lower mark next term if no improvement is seen	BB
1	B in discipline with warning	CB
1	B given to elicit promise of good teacher lurking in description	BC
1	Benefit of the doubt	BB

No. of Prin.	making in substance the comments listed below	and rating as below
3	Study methods, visits classrooms, professional courses, etc	1-CC 2-BB
1	Chance in another school	BB
1	Will do well under right kind of principal	BB

Case 5

7	With supervision and guidance should make good	3-BA 2-BB+ 2-BB
1	Benefit of doubt given; will improve under guidance	BB
1	A fault in licensing	BB
1	Lacks ability and education	BB
2	Intellectual limitations preclude a mark higher than B	BB+
3	Intellectual limitations not her fault; good all round teacher	2-B+B+ 1-BB+
1	Lack of intellectual ability, should not be fastened on system	CB
2	In higher grade than 3A teacher's lack of knowledge of subject matter would affect the discipline	BA
1	If results at end of term are not good, she is a poor teacher	BB+
2	An average teacher; will never become an A teacher	1-B+B+ 1-BB+
1	Poor but promising; her influence entitles her to B+	BB+
1	Helpful type	BB
3	Commendable spirit and loyalty	2-BB+ 1-BA
3	Advise scholastic study; observation of good methods	2-BB+ 1-BB
2	Principal to give more help	BB
2	Would improve if forced to do some independent work	BB+ BA
1	Special problem might bring out latent power	BB+
1	Less learning to celebrations and more attention to common sense rules	CB+
1	Credit given for supplementary activities	BA

Case 6

10	With improvement of physical conditions matters might be better	7-CC 3-BB
1	With better health and more experience will probably prove satisfactory	CC
10	Has no love for teaching and does not understand its obligations. Should get into some other work	9-CC 1-DC
1	A poor teacher without indications of improvement	CC
2	Hopeless until she changes her point of view	CC BC
7	Unless improvement be made, renewal of license should be opposed	5-CC 2-CD
1	Withholding salary increase would be remedial	CC

No. of Prin.	making in substance the comments listed below	and rating as below
1	Lacking in self-discipline	CC
1	Destructive criticism showing an argumentative attitude, is a serious defect	BC
8	Not a desirable element in school	6-CC 2-DD
1	"Dangerous"	CC
1	Will develop into a nuisance if she is not corrected	CC
1	If her attitude is due to extension courses where they preach such stuff, she might get B with a threat	CC
3	Poor results show poor teaching	CC
1	Must be aroused and spurred on to secure good work in 3d year	CC
1	Assign to drawing; give fair warning before rating	CC
	"In my opinion this teacher is suffering from over-emphasis of "individuality." She is a product of that same system "development of the individuality."—She has overlooked the most important phase—namely, the production of a strong, straight, firm stem before experiments are begun for development of variety in the bloom.	

Case 7

13	Chilling manner prevents rating of AA	9-AB+ 4-B+B+
1	Temperamentally cold	AA
1	A little too mechanical to be rated AA	B+B+
1	"Tis the heart and not the brain That the highest doth attain"	B+B+
1	Not cut out for a teacher, but on facts given would rate him	AB+
1	Little can be done to give a teacher greater sympathy for pupil	BB+
1	He should be advised as to his mistakes—fear *vs.* love	B+B+
1	A in discipline is debatable. Some boys might profit by the strict regime; others and girls might be too nervous to profit fully	AB+
3	Discipline not of the highest order	2-AB+ 1-AB
1	We need more of this type	AA
2	Would rate him AA in spite of theory	AA
2	Inspires respect; encourages effort	AA
4	A term with such a teacher would hurt no one even if pupils did not enjoy themselves	2-AA 2-B+A
1	Fault not most vital	AB+
1	Despite coldness is a fine teacher. Do not like fear shown by children	AB+

Case 8

2	If this teacher had longer experience would rate her A	B+A
1	Has earned AA. Many bound by tradition would not give a young teacher A	AA

No. of Prin.	making in substance the comments listed below	and rating as below
1	Had this teacher taught other grades would mark her A	B+B+
1	If she continued to do good work, should rate her AA at completion of third year	B+B+
1	Not my practice to rate a teacher A until third year, but this one deserves it	AA
5	Unusual for second year	4-AA 1-AB+
12	An A teacher in the making	6-B+A 6-B+B+
4	Should like a school of this kind	AA
4	A born teacher; will mellow with life experience	AA
9	A superior teacher, aloofness not to be considered	AA
1	Rarely found in our city schools; aloofness not to be considered a defect	AA
1	A great relief fom the ordinary chumming of teachers	AA
1	Better than being a gossip	B+B+
1	AA provided she is inspiring	AA
1	Presumed that teacher does not confine herself to intellectual development of pupils	AA

CASE 9

5	Not hopeful—almost hopeless	1-BB 1-CB 3-CC
1	Most discouraging; advise giving up teaching	DD
2	Will never succeed or make real good teacher	CC BB
1	Almost CC—can be made to improve	CB
2	Undesirable teacher	CB
1	Such teachers drive boys out of school	CC
1	Kind supervision to induce change	CC
2	Needs much guidance	BB CC
1	Advise extension courses	CB
2	Place in lower grade	BC BB
3	Recommend for trial another year in another school	1-BC 2-CB
4	Recommend probation another year in another school	3-CB 1-CC
4	Should not recommend for permanent license	1-CB 3-CC
1	Doubtful B	BB
1	Would give her rating between B and C in instruction if there were one	CC
1	Mark in discipline difficult without knowing means of control	CB
2	Lack of effort	CC
3	No excuse with three year' experience, for lack of preparation and knowledge	CB
1	In three years should have learned to keep room clean	BC
2	Poor teaching ability—poor class control—poor spirit —weak personality	CB CC

No. of Prin.	making in substance the comments listed below	and rating as below
1	Low level in instruction—give warning of C mark if no improvement is shown	BB
1	Higher ideals needed	DD
1	Better training needed	CC
2	Needs to see wideawake classes	BB
2	Needs sharp awakening	CC; BB
1	A shirk—needs a scare	CB
1	Needs a shock of dynamite	BB
1	Needs a good old-fashioned Dutch choice—should improve or get out	CC

CASE 10

1	Encourage retirement	BB
1	Needs a change of schools	BB+
1	Certain shortcomings and weaknesses recorded against teachers of long experience should have been corrected earlier in their career	BB+
1	If C's has been given in her early years, she might have become an honest teacher	CC
6	Cannot change—let her alone	1-BA 3-BB+ 2-BB
3	No doubt teacher would be B+ or A by that time. No inclination to change rating	AA BA BB+
1	Emphatically warned to avoid hammer-in type of drill	BB+
1	Were it not for suspicion of corporal punishment, would have rated BA	BB+
1	Valuable even if a by-law suffers occasionally	BB+
1	Success with recalcitrant means much, but "shaking" would be very bad	BB+
1	Love of ill behaved pupils offsets the suspicion of corporal punishment	BB+
	corporal punishment	BB+
9	A good influence in school	4-B+B+ 4-BB+ 1-BB
1	A very human kind of being	BB
1	A kind of mediocrity of which we have much. If all such were taken out, our schools would certainly be short handed	BB
1	Her only fault is in growing old lazily. This does not really harm her class	BB+
1	Her good points, results of experience, do not come from real effort	B+B+
1	Theoretically B+; practically A	AA

APPENDIX II—GENERAL COMMENTS BY PRINCIPALS UPON RATINGS ON TEACHERS

In practice we are too lenient with poor teachers and sometimes too niggardly with good ones. The rights of the children should be of first importance.

In rating some of the "numbered ones"—C, there has been held in mind the belief that C should not carry with it the permanent stigma that attaches to the C of to-day, a "blot on the 'scrutcheon," of later aspirants to professional (pedagogical) glory or position. C, administered as a spur to the lazy, or as a tonic to the temporary weak is effective—would be more effective when C means withholding annual increase in salary. The principal, rating a teacher C, should be obliged to give unquestionable evidence of *his* efforts in guiding the weak one. Responsibility is on both principal and teacher.

A is given only for exceptional teaching and discipline. Where some things are very fine and rather grave faults exist, no higher rating than B is given. No C rating is given when there is hope of improvement and a seeming possibility of it.

The above replies are made on the supposition that the teachers concerned have received all possible assistance from the principal and his assistants.

I recognize the imperfection of the above ratings. A principal is influenced by a hundred incidents and experiences, which by daily contact with the living teacher, assist in determining a just rating.

I am unalterably opposed to ratings of any kind, except unsatisfactory, when full explanation should be required. The above ratings will differ on every principal's report and mean nothing without explanation, or without knowledge of who is marking. In my last school I found the principal had given 188 A's out of a possible 192. Worst of all is the custom of handing ratings out to teachers, with whom one is expected to live. The way to get results is by personal contact, especially encouraging, and smiles of appreciation, effect of which is lost when followed by ratings not A.

These marks are given with hesitation. To my mind there should be two marks, satisfactory and unsatisfactory, and the unsatisfactory should be urged to seek other work.

In some of the above cases where teacher is poor or a failure, the principal is as much to blame as the teacher.

A very important element in each of the cases described is the kind of principal under whom these teachers have severally served. Personally, I am inclined to look first to myself when things go wrong, when instructions do not seem to be comprehended, when suggestions do not seem to be received in the proper spirit, or are not worked out in accordance with my ideas, or when other matters of similar nature arise. Principals are only human, and it seems to me that frequently the fault lies with them as much as with the teacher. Again, it is important to consider how much assistance has been given a teacher, the quality of such assistance, and the manner and spirit in which it was given.

The ability of the teacher to discipline and instruct children is best determined by observation and close inspection on the part of the principal. This fact makes it difficult to rate the ten cases sent to me. From my own viewpoint, as well as from my experience, the teacher is satisfactory or unsatisfactory and should be so rated. Even with so simple a marking it would be hard to reach uniform conclusions. No two principals see the teacher in the same light. A teacher satisfactory to one principal is sometimes unsatisfactory to another principal. Again ratings are cumulative. Their rating at the end of first term was B and gradually grew into B plus and finally into A.

It is difficult to get at the exact teacher and his work with the intimate personal element omitted. The individual conditions of the school and of the neighborhood are also necessary in forming such an estimate. I am therefore submitting these ratings with a certain reservation. I have tried to make this a *human* and not an *ideal* rating.

The burden of weight is thrown as far as possible upon the amount of good derived by the pupil from the teaching as evidenced in his intellectual progress, behavior and ambitions.

Satisfactory work here would give a teacher B.

When in addition to such capabilities there is displayed a proper disposition and attitude toward work, school, and those in authority, together with attention to mechanical detail and matters of routine, the teacher earns B plus.

The teacher who shows unusual qualifications and peculiar fitness or who secures exceptional results by unknown powers of personality, or by special means, is entitled to the highest mark of merit, A.

In cases of doubt I try to err on the side of leniency.

In other words we ought to be furnished with a definite objective scale. However, I have rated as best I could, the various descriptions sent, by the Indiana scale, slightly modified:

CHARACTER:—20 points, 5 for each topic
Personality of teacher
Professional interests
Community interests
Other qualities making for good citizenship

INSTRUCTION:—50 points

Preparation of lessons	(15)
Skill in presentation	(15)
Results obtained	(20)

DISCIPLINE:—30 points, 5 for each topic

General spirit of school
Attitude of pupils toward daily tasks
Attitude of pupils toward each other
Attitude of pupils toward school property
Keeping of records
Ability to comprehend instructions

Against the present rule for the periodic rating of all teachers may be urged:

The principal's primary function is one of encouragement, of leadership. This is not best exercised in the portioning out so many A's, so many B's, so many C's, to his associates.

The superior teacher does not need a periodic A. He is such most of all because he is most in love with his work. The really superior is the last to think himself such, in comparative consideration of his fellows. And, in fact, such thought is perhaps a hurt to the truly sensitive and superior. The teacher somewhat lacking in the divine fire is not kindled by a rating of inferiority but by the expressed approval of what he has done in an excellent way; and by the hint, or help, or the worded faith that what is C in his work, may with true-hearted effort become A.

Good teaching has its rootage in personality, in character. What we are we teach. To apply relative ratings to character, with its infinite variety, gradation and growth, is a task that increases in difficulty as the judge himself grows in sympathy, in knowledge, in power of appreciation.

Incommensurable tasks, differences of age, shiftings of health, development of special aptitudes,—all tend to make the method of comparative ratings more and more unsatisfactory.

Is it not true, that the more we know of a group of persons the less able and the less willing are we to express differentiated significant judgments in terms of A, B, C? The deeper our knowledge, the richer appears the personality of each, different in antecedents, in training, in accomplishment, in power; but, in worth and potentiality, each an infinite reflection of the infinite.

The chief utility of the ratings of teachers is the *determination* of fitness:

a. to remain in the employ of the city
b. for renewal of license
c. for increase of salary
d. for promotion

This determination would best be served by special reports, each having its particular aim in view.

C. The Results of the Sessions of Opportunity Classes Conducted in 1914

The facts of attendance in the opportunity classes of summer schools and the record of promotion at the end of the summer term had already afforded presumptive evidence of the worth and value of these classes. It was necessary, however, to verify this record by the subsequent school history of pupils in the following spring. A fall promotion in September followed by another in February, would seem to confirm the assumption that these opportunity classes save for many children six months of school life.

Superintendent Edward W. Stitt had already made arrangements for the prosecution of this inquiry when the Committee on Economy requested of this Division information concerning the progress of pupils attending opportunity classes in 1914. By co-operating with Dr. Stitt and tabulating certain additional reports, this Division was enabled to present at an earlier date a report which in time he would himself have prepared.

The types of children attending the "opportunity classes" are:

1. Holdovers, *i.e.*, those who had failed to receive promotion.

2. Over-age skippers, *i.e.*, over-age and bright pupils recommended by the day school principal as being able to skip a grade.

3. Compulsory Education Law pupils, *i.e.*, those who need attendance of 130 days for employment certificates.

4. Foreign pupils.

There were on register in these classes at the end of the last summer term 12,084 children. Out of this number 11,598 took the examinations for certificates, which were granted to 7,648. These certificates entitled the pupils to promotion to a higher class upon their return to regular school sessions in September.

The following table shows the number of children who obtained certificates and the number who maintained themselves in their studies during the term so as to receive promotion on February 1, 1915. These children, it will be noted, have saved six months' time.

Borough	From Reports of Superintendent Still*				From reports to Division of Reference and Research			Totals				
	No. of certificates granted†	Promoted Feb. 1, 1915	Not promoted Feb. 1, 1915	Total reported	Promoted Feb. 1, 1915	Not promoted Feb. 1, 1915	Total reported	Promoted Feb. 1, 1915	Not promoted Feb. 1, 1915	Total reported	Percent. successful	No. of schools reporting
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII
Manhattan	3459	1819	528	2347	499	233	732	2318	761	3079	75.2	156
Brooklyn	2212	808	259	1067	533	234	767	1341	493	1834	73.1	177
Queens	408	152	57	209	176	69	245	328	126	454	72.2	88
Bronx	1442	62	27	89	309	118	427	371	145	516	71.8	55
Richmond	127	18	16	34	42	32	74	60	48	108	55.5	30
Totals	7648	2859	887	3746	1559	686	2245	4418	1573	5991	73.7	506

* Reports on these children were required by the Supervisor of Opportunity Classes by February 15, 1915. This Division supplemented the figures and data of the supervisor by reports from those schools which had not previously responded.

† This certificate entitled children to promotion on return to school in September.

There is, too, an actual saving in money as a result of the establishment of opportunity classes. In 1914 approximately $26,000 were expended for opportunity classes. If it be assumed that this cost be charged exclusively to the 6,000 pupils (5,991), then the per capita cost of instruction would be $4.33.

The average annual per capita cost of the elementary school pupil is forty dollars, which for a half year or term would be twenty dollars. Therefore, the cost for summer schools per pupil is approximately twenty-two per cent. of the cost for a pupil in the regular elementary session.

Not all of these pupils cover a whole grade in the term; nor does every pupil in the regular sessions. Yet if the total cost be divided among 4,418 successful pupils, this would be equal to $5.89 for each successful pupil—less than one-third of the cost had these pupils been compelled to remain in their grades for a regular term.

The saving in money is in part deceptive; that is, it does not necessarily follow that the reduction in number of hold-overs involves reduction in the corresponding number of teachers by class groups. There can be no question, however, that pupils do save a half year of their school life.

D. Time Distribution in the Elementary Course of Study

A vital problem in present-day educational administration is the elimination of time waste in the elementary schools. Is the period of elementary schooling too long? Can the knowledge, habits, ideals and attitudes essential for individual and social needs be acquired in less time?

A mere reduction in time of the school course is not desirable, if it involves corresponding reduction in the value of the instruction and training of the pupil. The aim is to obtain results as good or better without a waste in effort, a mere dawdling for a greater number of hours.

How then may time be economized? "By the elimination of non-essential subjects or subject matter, by improvement in methods of teaching and learning, and by organization of the whole school system and course of study so that each part may

be taken at the optional time in the child's development." (Report of Committee on Economy of Time, Fourteenth Year-Book, National Society for the Study of Education.)

The first step towards the solution of the problem of economy of school time requires the determination of a minimum standard curriculum so constituted and so organized as to accomplish fully the purposes of elementary education. Professor Dewey says that the problem is "the selection of the kind, variety, and due proportion of subjects answering most definitely to the dominant needs and powers of presentation that will cause the selected material to enter vitally into growth."* The difficulty is in determining just what materials, and what methods, what proportion and what arrangements are most opportune and helpful at a given time.

Professor Henry W. Holmes, in the Fourteenth Year-Book of the National Society for the Study of Education, reports a study of time distribution by subjects and grades in the elementary schools of fifty American cities. The data reported show the great divergence in the distribution and allotment of time among the elementary school subjects.

Such disagreements in practice are significant. Apparently there is no norm. Whether a pupil should have 100 hours of reading or 570 hours is a matter of opinion, and, as Professor Holmes' table indicates, an opinion so variable as not even to suggest a possible standard. Whatever may be the best course of study, both as to content or time distribution, the present practice, as this investigation shows, affords little suggestion.

As a step in advance, attention is called to a suggested course in English grammar determined from data collated in the schools of Kansas City, Mo., under the direction of Professor Chartres. (See pages 84-89).

A study similar to Professor Holmes', but confined, however, to New York City's courses of study past and present, was undertaken by this Division recently. The time allotments in the courses of study since 1860 are shown in the accompanying schedule.

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* Psychology of the Curriculum.

Subject	First Year							
	1860	1870	1880	Reg. 1890	Man. Tr. 1890	1900	1912	1915
Opening Exercises	*	*	150	75	75	75	75	75
Physical Training	.....	.....	*	*	*	*	450	300
Recesses	.....	.....	90	100	100	100		
Physiology and Hygiene	.....	*	.....	.....	.....	*		
Language or English	*	*	480	360	330	360	450	570
Oral Lessons on Natural Philosophy, Science, Astronomy, etc	*	.....	.....	.....	.....	.....	.....	.....
Object Lessons	.....	*	120	.....	.....	.....	.....	.....
Science	.....	.....	.....	.....	.....	.....	.....	.....
Nature Study	.....	*	.....	.....	.....	†	90	60
Geography	.....	.....	.....	.....	.....	.....	.....	.....
History	.....	.....	.....	.....	.....	.....	.....	†
Arithmetic	*	*	360	240	210	180	125	90
Algebra	.....	.....	.....	.....	.....	.....	.....	.....
Plane Geometry	.....	.....	.....	.....	.....	.....	.....	.....
Bookkeeping	.....	.....	.....	.....	.....	.....	.....	.....
Electives	.....	.....	.....	.....	.....	.....	.....	.....
Drawing	.....	*	60	30	90	180	120	90
Constructive Work	.....	.....	.....	.....	.....	180	30	30
Sewing	.....	.....	Opt.	.....	.....	.....	.....	30
Shopwork	.....	.....	.....	.....	.....	.....	.....	.....
Cooking	.....	.....	.....	.....	.....	.....	.....	.....
Music	*	*	60	25	*	60	60	40
Penmanship	.....	*	120	120	90	90	100	*f* .....
Manners and Morals. Ethics	.....	*	*	*	*	*	*	*
Study and Unassigned Time	*a* 1500	1500	60	550	605	455	0	*b* 245
Totals	1500	1500	1500	1500	1500	1500	1500	1500

Subject	Second Year							
	1860	1870	1880	Reg. 1890	Man. Tr. 1890	1900	1912	1915
Opening Exercises	*	*	120	75	75	75	75	75
Physical Training	.....	.....	*	*	*	*	165	180
Recesses	.....	.....	90	100	100	100		
Physiology and Hygiene	.....	*	.....	.....	.....	*		
Language or English	*	*	480	360	330	360	510	690
Oral Lessons on Natural Philosophy, Science, Astronomy, etc	*	.....	.....	.....	.....	.....	.....	.....
Object Lessons	.....	*	90	.....	.....	.....	.....	.....
Science	.....	.....	.....	.....	.....	.....	.....	.....
Nature Study	.....	*	.....	.....	.....	†	90	60
Geography	.....	.....	60	.....	.....	.....	.....	.....
History	.....	.....	.....	.....	.....	.....	.....	†
Arithmetic	*	*	360	240	210	180	150	180
Algebra	.....	.....	.....	.....	.....	.....	.....	.....
Plane Geometry	.....	.....	.....	.....	.....	.....	.....	.....
Bookkeeping	.....	.....	.....	.....	.....	.....	.....	.....
Electives	.....	.....	.....	.....	.....	.....	.....	.....
Drawing	.....	*	60	30	90	180	120	90
Constructive Work	.....	.....	.....	.....	60	180	30	30
Sewing	.....	.....	Opt.	60 *d*	60	† 60	.....	30
Shopwork	.....	.....	.....	.....	.....	.....	.....	.....
Cooking	.....	.....	.....	.....	.....	.....	.....	.....
Music	*	*	60	25	*	60	60	40
Penmanship	.....	*	120	120	90	90	125	*f* .....
Manners and Morals. Ethics	.....	*	*	*	*	*	*	*
Study and Unassigned Time	*a* 1500	1500	60	550	545	455	175	*b* 155
Totals	1500	1500	1500	1500	1500	1500	1500	1500

Subject	THIRD YEAR							
	1860	1870	1880	Reg. 1890	Man. Tr. 1890	1900	1912	1915
Opening Exercises	*	*	120	75	75	75	75	75
Physical Training	.....	.....	*	*	*	*		
Recesses	.....	.....	60	75	75	100	165	180
Physiology and Hygiene	.....	.....	.....	.....	.....	*		
Language or English	*	*	480	360	330	420	450	690
Oral Lessons on Natural Philosophy, Science, Astronomy, etc.	*	.....	.....	.....	.....	.....	.....	.....
Object Lessons	.....	*	90	.....	.....	.....	.....	.....
Science	.....	.....	.....	.....	.....	.....	.....	.....
Nature Study	.....	*	.....	.....	.....	†	90	60
Geography	*	*	60	30	.....	.....	.....	.....
History	.....	.....	.....	.....	.....	.....	.....	†
Arithmetic	*	*	390	240	210	180	150	150
Algebra	.....	.....	.....	.....	.....	.....	.....	.....
Plane Geometry	.....	.....	.....	.....	.....	.....	.....	.....
Bookkeeping	.....	.....	.....	.....	.....	.....	.....	.....
Electives	.....	.....	.....	.....	.....	.....	.....	.....
Drawing	*	*	60	30	90	180	120	90
Constructive Work	.....	.....	.....	.....	60	180	30	60
Sewing	.....	.....	Opt.	*d* 60	60	† 60	30	60
Shopwork	.....	.....	.....	.....	.....	.....	.....	.....
Cooking	.....	.....	.....	.....	.....	.....	.....	.....
Music	*	*	60	25	*	60	60	40
Penmanship	*	*	120	120	120	90	125	*f* .....
Manners and Morals. Ethics	.....	*	*	*	*	*	*	*
Study and Unassigned Time	*a* 1500	1500	60	545	540	395	205	*b* 155
Totals	1500	1500	1500	1500	1500	1500	1500	1500

Subject	Fourth Year							
	1860	1870	1880	Reg. 1890	Man. Tr. 1890	1900	1912	1915
Opening Exercises	*	*	140	75	75	75	75	75
Physical Training	.....	.....	*	*	*	50	150	150
Recesses	.....	.....	.....	.....	.....	.....		
Physiology and Hygiene	.....	.....	†	.....	.....	†		
Language or English	*	*	500	300	270	390	375	600
Oral Lessons on Natural Philosophy, Science, Astronomy, etc	.....	*	80	.....	.....	.....	.....	.....
Object Lessons	.....	.....	.....	.....	.....	.....	.....	.....
Science	.....	.....	.....	.....	.....	30	.....	.....
Nature Study	.....	.....	.....	.....	.....	.....	90	60
Geography	*	*	120	60	45	60	135	90
History	.....	.....	.....	40	.....	60	.....	†
Arithmetic	*	*	300	180	180	180	150	150
Algebra	.....	.....	.....	.....	.....	.....	.....	.....
Plane Geometry	.....	.....	.....	.....	.....	.....	.....	.....
Bookkeeping	.....	.....	.....	.....	.....	.....	.....	.....
Electives	.....	*	.....	.....	.....	.....	.....	.....
Drawing	*	*	90	40	90	180	120	90
Constructive Work	.....	.....	.....	.....	.....	180	120	60
Sewing	.....	Opt.	Opt.	*	60 [d]	Opt. †60	60	60
Shopwork	.....	.....	.....	.....	.....	.....	.....	.....
Cooking	.....	.....	.....	.....	.....	.....	.....	.....
Music	*	*	90	60	60	60	60	40
Penmanship	*	*	120	120	120	†	75	..... [f]
Manners and Morals. Ethics	.....	.....	*	*	*	*	*	*
Study and Unassigned Time	1500 [a]	1500	60	625	610	415	210	185 [b]
Totals	1500	1500	1500	1500	1500	1500	1500	1500

Subject	Fifth Year							
	1860	1870	1880	Reg. 1890	Man. Tr. 1890	1900	1912	1915
Opening Exercises	*	*	140	75	75	75	75	75
Physical Training	.....	.....	*	*	*	50	90	90
Recesses	.....	.....	.....	.....	.....	.....		
Physiology and Hygiene	.....	.....	.....	.....	.....	†		
Language or English	*	*	500	300	270	390	375	480
Oral Lessons on Natural Philosophy, Science, Astronomy, etc	.....	*	80	.....	.....	.....	.....	.....
Object Lessons	.....	.....	.....	.....	.....	.....	.....	.....
Science	.....	.....	.....	.....	.....	30	.....	.....
Nature Study	.....	.....	.....	.....	.....	.....	75	60
Geography	*	*	120	60	60	60	120	90
History	*	.....	.....	40	60	60	90	90
Arithmetic	*	*	300	180	150	180	150	150
Algebra	.....	.....	.....	.....	.....	.....	.....	.....
Plane Geometry	.....	.....	.....	.....	.....	.....	.....	.....
Bookkeeping	.....	.....	.....	.....	.....	.....	.....	.....
Electives	.....	*	.....	*e* 100	.....	*e* 100	.....	.....
Drawing	*	*	90	40	120	180	120	90
Constructive Work	.....	.....	.....	.....	.....	180	120	60
Sewing	.....	Opt.	Opt.	*	*d* 60	Opt. 60	60	60
Shopwork *c*	.....	.....	.....	.....	*d* 120	†	.....	.....
Cooking *c*	.....	.....	.....	.....	.....	.....	.....	.....
Music	*	*	90	60	60	60	60	40
Penmanship	*	*	120	120	120	†	75	*f* .....
Manners and Morals. Ethics	.....	.....	*	*	*	*	*	*
Study and Unassigned Time	*a* 1500	1500	60	625	585	415	210	*b* 275
Totals	1500	1500	1500	1500	1500	1500	1500	1500

Subject	Sixth Year							
	1860	1870	1880	Reg. 1890	Man. Tr. 1890	1900	1912	1915
Opening Exercises	*	*	140	75	75	75	75	75
Physical Training	.....	.....	*	*	*	50	90	90
Recesses	.....	.....	.....	.....	.....	.....		
Physiology and Hygiene	.....	†	.....	.....	.....	†		
Language or English	*	*	480	300	270	360	375	480
Oral Lessons on Natural Philosophy, Science, Astronomy, etc	.....	*	80	.....	.....	.....	.....	.....
Object Lessons	.....	.....	.....	.....	.....	.....	.....	.....
Science	*	.....	.....	.....	.....	30	.....	.....
Nature Study	.....	.....	.....	.....	.....	.....	.....	60
Geography	*	*	120	60	60	60	120	90
History	*	*	80	40	60	60	120	90
Arithmetic	*	*	160	180	150	150	200	150
Algebra	*	.....	120	.....	.....	.....	.....	.....
Plane Geometry	.....	.....	.....	.....	.....	.....	.....	.....
Bookkeeping	.....	.....	†	.....	.....	.....	.....	.....
Electives	.....	*	*	e 100	.....	e 100	.....	.....
Drawing	*	*	50	40	120	180	120	90
Constructive Work	.....	.....	.....	.....	.....	180	120	60
Sewing	.....	Opt.	Opt.	*	d 60	Opt. 60	60	60
Shopwork c	.....	.....	.....	.....	d 120	†90 90	.....	.....
Cooking c	.....	.....	.....	.....	d 60	Opt.	.....	.....
Music	*	*	90	60	60	60	60	40
Penmanship	*	*	120	120	120	†	75	f
Manners and Morals. Ethics	.....	.....	*	*	*	*	*	*
Study and Unassigned Time	a 1500	1500	60	625	585	475	205	b 275
Totals	1500	1500	1500	1500	1500	1500	1500	1500

Subject	Seventh Year							
	1860	1870	1880	Reg. 1890	Man. Tr. 1890	1900	1912	1915
Opening Exercises	*	*	140	75	75	75	75	75
Physical Training	.....	.....	*	*	*	50	90	80
Recesses	.....	.....	.....	.....	.....	.....		
Physiology and Hygiene	.....	.....	.....	.....	.....	†		
Language or English	*	*	480	300	270	360	360	400
Oral Lessons on Natural Philosophy, Science, Astronomy, etc	.....	*	80	.....	.....	.....	.....	.....
Object Lessons	.....	.....	.....	.....	.....	.....	.....	.....
Science	*	.....	.....	.....	.....	30	80	80
Nature Study	.....	.....	.....	.....	.....	.....	.....	.....
Geography	.....	*	120	60	.....	60	120	80
History	*	*	80	40	60	60	120	120
Arithmetic	.....	*	160	180	150	150	200	200
Algebra	*	*	120	* Opt.	.....	.....	.....	.....
Plane Geometry	.....	*	.....	*	.....	.....	.....	.....
Bookkeeping	*	*	†	*	.....	.....	.....	.....
Electives	.....	*	*	*e* 100	.....	*e* 100	.....	.....
Drawing	*	*	50	40	120	180	80	80
Constructive Work	.....	.....	.....	.....	.....	180	.....	.....
Sewing	.....	Opt.	Opt.	*	.....	.....	80	.....
Shopwork *c*	.....	.....	.....	.....	*d* 120	Opt.	80	80
Cooking *c*	.....	.....	.....	.....	*d* 60	*d* 90 Opt. 90	80	80
Music	*	*	90	60	60	60	60	40
Penmanship	*	*	120	120	120	†	.....	*f*
Manners and Morals. Ethics	.....	.....	*	*	*	*	*	*
Study and Unassigned Time	*a* 1500	1500	60	625	645	475	235	*b* 265
Totals	1500	1500	1500	1500	1500	1500	1500	1500

Subject	Eighth Year							
	1860	1870	1880	1890	1890	1900	1912	1915
Opening Exercises	.....	.....	.....	.....	.....	.....	75	75
Physical Training	.....	.....	.....	.....	.....	.....	90	80
Recesses	.....	.....	.....	.....	.....	.....		
Physiology and Hygiene	.....	.....	.....	.....	.....	.....		
Language or English	.....	.....	.....	.....	.....	.....	320	320
Oral Lessons on Natural Philosophy, Science, Astronomy, etc	.....	.....	.....	.....	.....	.....	.....	.....
Object Lessons	.....	.....	.....	.....	.....	.....	.....	.....
Science	.....	.....	.....	.....	.....	.....	80	80
Nature Study	.....	.....	.....	.....	.....	.....	.....	.....
Geography	.....	.....	.....	.....	.....	.....	Opt. 80	Opt.
History	.....	.....	.....	.....	.....	.....	120	120
Arithmetic	.....	.....	.....	.....	.....	.....	200	200
Algebra	.....	.....	.....	.....	.....	.....	.....	.....
Plane Geometry	.....	.....	.....	.....	.....	.....	.....	.....
Bookkeeping	.....	.....	.....	.....	.....	.....	.....	.....
Electives	.....	.....	.....	.....	.....	.....	200	200
Drawing	.....	.....	.....	.....	.....	.....	80	80
Constructive Work	.....	.....	.....	.....	.....	.....	.....	.....
Sewing	.....	.....	.....	.....	.....	.....	80	.....
Shopwork *c*	.....	.....	.....	.....	.....	.....	80	80
Cooking *c*	.....	.....	.....	.....	.....	.....	80	80
Music	.....	.....	.....	.....	.....	.....	60	40
Penmanship	.....	.....	.....	.....	.....	.....	.....	*f*
Manners and Morals. Ethics	.....	.....	.....	.....	.....	.....	*	*
Study and Unassigned Time	.....	.....	.....	.....	.....	.....	195	*b*225
Totals	.....	.....	.....	.....	.....	.....	1500	1500

* Subjects taught with no time prescribed.

† Subjects taught but included in time of some other subjects. Opt. Optional, —not counted in totals. Subjects bracketed count only as having one period of the time specified.

a. In 1860 it was provided that 120 minutes per day be devoted to study and preparation.

b. In 1915 one study period is required each day. The number of minutes not fixed, and may be taken from the unassigned time or from that of any subject, in the judgment of the principal.

c. In schools having facilities (1890 and 1900).

d. Not counted in total—applies only to one sex.

e. Not counted in totals. If electives were not chosen the principal distributed the time according to his discretion. In 1915 such time if electives were not chosen must be devoted to English and geography. Therefore time assigned to electives in 1915 is counted.

f. A foot-note in the time schedule for 1915, prescribes that in the first six years at least 75 minutes be devoted per week to penmanship, in the seventh and eighth years 60 minutes. Time devoted to penmanship in 1915 is, however, included in the minutes allotted to "Language or English."

II. SECONDARY INSTRUCTION

A Record of Elimination and Survival in the First Three Terms of New York City High Schools for 14,158 Pupils

In compliance with the request of a Committee of the Board, this Division collected certain data bearing on the elimination of pupils.

Many assertions have been made concerning the percentage of loss of pupils in high schools. Many of these estimates are wholly deceptive in that they are based on a comparison of registers of a class during successive terms, such registers representing not the same pupils but the same official class.

The membership of such a class changes in many ways. The loss in registration does not represent the net loss of those who have dropped out; some pupils fail of promotion, some continue their studies in other high schools. Additions are made to the class by holdovers and new admissions. A comparison of successive registers, therefore, is not an accurate basis of estimating elimination.

Notwithstanding the defects of this easy though deceptive method of estimating high school mortality, it is not so faulty as another method which compares the registration of successive years or terms at any one time, and by a comparison of these registrations, derives certain percentages of so-called loss.

A fairly accurate method is to examine the cards of a beginning class of pupils and to follow the record of each individual. It is the method which has been followed in this study.

The facts obtained were:

1. The number of pupils entering the high schools in September, 1913;

2. The number (out of this group) leaving school during the terms beginning September, 1913, February, 1914, and September, 1914.

3. The causes for leaving the high school.

Table A shows the figures for the first and second of the above-named groups of facts. Out of 14,158 children entering

high school in September, 1913, 3,597 dropped out in the first term, 1,643 in the second term, and 1,711 in the third term, leaving 7,207 of the original group at the end of the third term in the high schools originally entered. It must be noted, however, that of the number leaving, 946 were transferred to other public high schools in the first term, 232 in the second term, and 247 in the third term. Such pupils cannot be classed as eliminated inasmuch as they continued in some other high school in the city. The real loss was then 2,651 for the first term, 1,411 for the second term, and 1,464 for the third term, a total of 5,526.

TABLE A—HIGH SCHOOL ELIMINATION

High School	No. who entered Sept., 1913	No. who dropped out Term beginning				No. transferred to another public high school Term beginning				Grand total discharged	Per cent. of elimination§	No. still on register Feb. 1, 1915
		Sep., 1913	Feb., 1914	Sep., 1914	Total	Sep., 1913	Feb., 1914	Sep., 1914	Total			
Commerce	763	161	80	74	315	5	7	15	27	342	.413	421
DeWitt Clinton	951	201	108	104	413	24	4	9	37	450	.434	501
Julia Richman	604	78	77	76	231	15	21	53	89	320	.382	284
Stuyvesant	845	187	76	106	369	48	9	20	77	446	.436	399
Wadleigh	608	104	65	53	222	37	13	16	66	288	.365	320
Washington Irving	1839	293	104	100	497	493*	72	31	596	1093	.270	746
Evander Childs	506	92	54	59	205	28	9	9	46	251	.405	255
Morris	735	170‡	98	94	362	45	9	14	68	430	.492	305
Bay Ridge	302	65	42	38	145	11	3	4	18	163	.480	139
Bushwick	739	128	87	100	315	26	7	8	41	356	.426	383
Boys'	581	68	44	57	169	35	12	15	62	231	.291	350
Commercial	806	142	64	63	269	6	3	1	10	279	.333	527
Eastern District	659	106	84	91	281	13	13	14	40	321	.426	338
Erasmus Hall	608	115	34	25	174	29	15	0	44	218	.286	390
Girls'	644	96	55	66	217	19	12	10	41	258	.337	386
Manual Training	1194	329	155	132	616	75†	10	9	94	710	.516	484
Bryant	339	68	29	59	156	7	3	6	16	172	.460	167
Far Rockaway	81	10	7	11	28	6	1	2	9	37	.345	44
Flushing	201	33	17	25	75	3	1	1	5	80	.373	121
Jamaica	220	35	16	26	77	8	1	3	12	89	.350	131
Newtown	238	59	17	25	101	0	1	2	3	104	.424	134
Richmond Hill	364	55	54	48	157	13	4	1	18	175	.431	189
Curtis	331	66	44	32	142	0	2	4	6	138	.430	193
Total	14158	2661	1411	1464	5536	946	232	247	1425	6951	.390§	7207

* Most of these went to Julia Richman High School, organized that year.
† Most of these went to Bay Ridge High School.
‡ Most of these pupils registered but never attended.
§ Not including those transferred to other public high schools.

Table B shows the elimination by percentages for the various schools by terms. The heaviest elimination occurred in the first term, amounting to 18.7%. In this table again, those transferred are not included. It was planned to trace the history of an entering class within the limits of each high school respectively. Had opportunity offered, it would have been interesting to trace further the history of those pupils transferred to other high schools. Some of these may have dropped out during the second or third terms, which fact would have made larger the number of eliminates. Nothing can be predicted positively of the subsequent career of the pupil after transfer, from these tables, although such information could be collated were there sufficient aid and time available.

TABLE B—TABLE SHOWING ELIMINATION BY PERCENTAGES

High School	*Including those transferred to other public high schools* — *Term beginning*				*Not including those transferred to other public high schools* — *Term beginning*			
	Sept., 1913	*Feb., 1914*	*Sept., 1914*	*Total*	*Sept., 1913*	*Feb., 1914*	*Sept., 1914*	*Total*
Commerce	.217	.114	.117	.448	.211	.105	.097	.413
De Witt Clinton	.237	.118	.118	.473	.211	.113	.109	.433
Julia Richman	.154	.162	.213	.529	.129	.127	.126	.382
Stuyvesant	.278	.101	.149	.528	.221	.090	.125	.436
Wadleigh	.232	.128	.113	.473	.171	.107	.087	.365
Washington Irving	.427	.095	.071	.593	.159	.057	.054	.270
Evander Childs	.237	.124	.134	.495	.182	.107	.116	.405
Morris	.292	.146	.147	.585	.231	.133	.128	.492
Bay Ridge	.252	.149	.139	.540	.215	.139	.126	.480
Boys'	.177	.096	.124	.397	.117	.076	.098	.291
Bushwick	.208	.127	.146	.481	.173	.118	.135	.426
Commercial	.183	.083	.080	.346	.176	.079	.078	.333
Eastern District	.181	.147	.160	.488	.161	.127	.138	.426
Erasmus Hall	.237	.081	.041	.359	.189	.056	.041	.286
Girls'	.179	.104	.118	.401	.149	.085	.102	.337
Manual Training	.338	.138	.118	.594	.276	.129	.111	.516
Bryant	.221	.094	.091	.406	.200	.086	.174	.460
Far Rockaway	.198	.100	.160	.458	.123	.086	.136	.345
Flushing	.179	.090	.129	.398	.164	.085	.124	.373
Jamaica	.195	.077	.132	.404	.159	.073	.118	.350
Newtown	.247	.076	.114	.437	.248	.071	.105	.424
Richmond Hill	.190	.160	.135	.485	.151	.148	.132	.431
Curtis	.169	.139	.109	.417	.169	.133	.097	.430
Total	.254	.116	.120	.490	.187	.100	.103	.390

Table C shows the causes of elimination as reported by the principals of the high schools. The chief cause given is "going to work."

The causes assigned must always remain in question until the high schools are better equipped to confirm the statements made by pupils or parents. The study of the subject prepared by Dr. Joseph K. Van Denburg, "Causes of the Elimination of Students in Public Secondary Schools of New York City" (Contribution to Education, Teachers' College, Columbia University, No. 47, 1911), is a model for students, but its very details makes it practically impossible of application on a large scale. For instance, Dr. Van Denburg quotes a case of one pupil who left school, according to the official report, on account of "ill-health." Investigation showed that this statement, made by the pupil herself, had no basis of truth whatever, and that eight other reasons advanced by her teachers, her parents and her classmates may have been true in part.

Answers to questionnaires which in part are themselves based on unreliable information, raise a doubt as to the value of any investigation. This word of caution which might well be spoken concerning much that is offered in the name of educational research, is therefore uttered when interpreting the following table:

TABLE C—CAUSES OF ELIMINATION

High School	To work				To private schools				To other H. S.				Removal from city			
	Terms			Total	Terms			Total	Terms			Total	Terms			Total
	1st	2d	3d		1st	2d	3d		1st	2d	3d		1st	2d	3d	
Commerce	37	41	34	112	3	1	0	4	5	7	15	27	3	3	1	7
De Witt Clinton	71	25	12	108	14	1	1	16	24	4	9	37	8	7	1	16
Julia Richman	21	17	11	49	21	14	15	50	15	21	53	89	3	9	5	17
Stuyvesant	114	48	91	253	18	1	—	19	48	9	20	77	7	9	—	16
Wadleigh	20	8	5	33	30	12	18	60	37	13	16	66	9	9	7	25
Washington Irving	162	60	64	286	106	35	28	169	493*	72	31	596	7	3	6	16
Evander Childs	57	40	46	143	23	7	7	37	28	9	9	46	5	3	3	11
Morris	92	60	49	201	30	15	21	66	45	9	14	68	11	4	14	29
Bay Ridge	29	11	8	48	9	7	5	21	11	3	4	18	5	6	3	14
Boys'	41	21	31	93	8	4	7	19	35	12	15	62	5	5	3	13
Bushwick	80	51	38	169	20	10	22	52	26	7	8	41	—	2	3	5
Commercial	113	54	60	227	7	1	1	9	6	3	1	10	4	1	2	7
Eastern District	66	54	64	184	14	9	10	33	13	13	14	40	6	1	5	12
Erasmus Hall	37	9	6	52	42	6	4	52	29	15	0	44	10	6	4	20
Girls'	16	11	13	40	22	13	19	54	19	12	10	41	4	11	9	24
Manual Training	100	38	20	158	62	17	10	89	75†	10	9	94	20	12	4	36
Bryant	30	13	23	66	6	4	5	15	7	3	6	16	3	—	4	7
Far Rockaway	3	3	—	6	1	1	2	4	6	1	2	9	2	1	3	6
Flushing	14	9	10	33	12	3	8	23	3	1	1	5	4	3	5	12
Jamaica	5	7	4	16	5	1	4	10	8	1	3	12	1	1	2	4
Newtown	46	12	18	76	2	—	1	3	—	1	2	3	—	1	—	1
Richmond Hill	22	21	8	51	14	5	11	30	13	4	1	18	7	1	5	13
Curtis	21	18	16	55	12	11	7	30	—	2	4	6	2	3	2	7
Total	1197	631	631	2459	481	178	206	865	946	232	247	1425	126	101	91	318

High School	Illness				Mental incapacity				Other causes				Total dropping out			
	Terms			Total	Terms			Total	Terms			Total	Terms			Total
	1st	2d	3d		1st	2d	3d		1st	2d	3d		1st	2d	3d	
Commerce	1	0	0	1	2	3	5	10	115	32	34	181	166	87	89	342
De Witt Clinton	1	—	2	3	—	—	—	—	107	75	88	270	225	112	113	450
Julia Richman	6	6	4	16	3	—	1	4	24	31	40	95	93	98	129	320
Stuyvesant	—	—	—	—	2	—	—	2	46	18	15	79	235	85	126	446
Wadleigh	11	15	8	34	—	—	—	—	34	21	15	70	141	78	69	288
Washington Irving	18	6	2	26	—	—	—	—	—	—	—	—	786	176	131	1093
Evander Childs	6	3	2	11	—	—	—	—	1	1	1	3	120	63	68	251
Morris	17	7	4	28	—	—	—	—	20	12	6	38	215‡	107	108	430
Bay Ridge	9	4	2	15	—	—	—	—	13	14	20	47	76	45	42	163
Boys'	7	3	3	13	1	—	—	1	6	11	13	30	103	56	72	231
Bushwick	13	9	14	36	—	—	—	—	15	15	23	53	154	94	108	356
Commercial	5	3	—	8	2	2	—	4	11	3	—	14	148	67	64	279
Eastern District	9	8	7	24	—	—	—	—	11	12	5	28	119	97	105	321
Erasmus Hall	21	7	5	33	—	—	—	—	5	6	6	17	144	49	25	218
Girls'	19	9	7	35	—	—	1	1	35	11	17	63	115	67	76	258
Manual Training	36	8	9	53	60	63	67	190	51	17	22	90	404	165	141	710
Bryant	—	—	—	—	—	—	—	—	29	12	27	68	75	32	65	172
Far Rockaway	2	—	—	2	—	—	—	—	2	2	6	10	16	8	13	37
Flushing	3	1	2	6	—	—	—	—	—	1	—	1	36	18	26	80
Jamaica	1	2	2	5	—	—	—	—	23	5	14	42	43	17	29	89
Newtown	1	—	2	3	—	1	—	1	10	3	4	17	59	18	27	104
Richmond Hill	3	3	1	7	—	1	—	1	9	23	23	55	68	58	49	175
Curtis	1	2	—	3	—	—	—	—	20	10	7	37	56	46	36	138
Total	190	96	76	362	70	70	74	214	587	335	386	1308	3597	1643	1711	6951

* Most of these went to Julia Richman, organized that year. † Most of these went to Bay Ridge H. S., organized that year. ‡ Of these 171 registered but never attended.

Table D gives the total number of pupils eliminated, classified according to causes of elimination. For example, during the first term 1,197 left the high schools to go to work; 481 left to enter private schools, etc. During the second term, 631 went to work; 178 to private schools; 101 removed from the City, etc.

The right-hand side of the table gives the percentages based upon the net elimination, *i.e.*, not including transferred pupils. It shows what percentage of the total elimination is due to each cause; thus, 45.1% of the elimination in the first term was due to "work"; 18.1% to entering private schools; 4.7% to removal from the City, etc.

TABLE D—CAUSES OF ELIMINATION

Cause	No. of pupils				Percentages			
	1st Term	2d Term	3d Term	Total	1st Term	2d Term	3d Term	Total
To work	1197	631	631	2459	.451	.447	.431	.445
To private schools	481	178	206	865	.181	.126	.141	.156
Removal from City	126	101	91	318	.047	.071	.062	.057
Illness	190	96	76	362	.071	.068	.052	.066
Mental incapacity	70	70	74	214	.026	.049	.051	.039
Other causes	587	335	386	1308	.221	.237	.263	.237
Total	2651	1411	1464	5526	.997	.998	1.00	1.00
To other H. S.	946	232	247	1425				
Grand total	3597	1643	1711	6951				

A study of the figures in the foregoing tables does suggest the need of modification of the present methods of administration and instruction in high schools. Nearly fifty per cent. of those who leave at the end of the first term do so because they must go to work, yet it is scarcely possible to assume that economic

necessity, which operates so potently at the end of the first term, would not have been equally effective in driving the pupil to work at the beginning. Whether the fault be of insufficient elementary preparation among pupils, or of inadequate methods in high school instruction, it is probably true that the reason which prompted the pupil to leave high school was not actually that of economic necessity.

Again when thirty per cent. of a new class on the average leaves high school within a year, it is pertinent to inquire whether that fact may not bear an intimate relation to a change in administrative method, such as the establishment of the so-called six, three and three plan by which the continuity of a plan of instruction may be arranged with reference to the school life of the pupil rather than to traditional modes of organization.

III. MISCELLANEOUS AND GENERAL

A. A Summary of Reports or Other Actions of the Department of Education of The City of New York in Relation to the New York School Inquiry Reports

The following statement has been prepared by this Division in order to have for ready reference the reports of those who considered the reports of the Committee on the New York City School Inquiry. Some of the results of the inquiry are also noted.

1. 15th Annual Report of the City Superintendent of Schools, Appendix G:
   a. A study of Dr. McMurry's Report on Instruction and Supervision in Elementary Schools by a committee of ten principals.
   b. "The Courtis Tests in Arithmetic"—by Middlesex A. Bailey, Head of Mathematics Department, New York Training School for Teachers.
   c. "Physical Training and Hygiene"—by C. Ward Crampton, Director of Physical Training.
   d. Discussion of the Report of Calvin O. Davis on High School Courses of Study except Commercial Courses—by a committee of principals and teachers.
   e. Review of Frank V. Thompson's Report on High Schools of Commerce—by J. J. Sheppard, late Principal, High School of Commerce.
   f. Dr. Schneider's Report on Vocational Training—review by Gustave Straubenmüller, Associate City Superintendent.
2. A Review of the Hanus-Elliott report and reply—by the Board of Superintendents. (Presented to the Board of Education April 23, 1913—Document No. 5, 1913.)
3. On May 26, 1915, a report was presented to the Board of Education by the Special Committee appointed to consider the report of Professor Edward C. Elliott on The System of General Supervision and the Boardof Examiners. (Minutes, Board of Education, May 26, 1915.)

   Note:—The report states that many parts of the Elliott report need not now be given further consideration in view of the fact that recommendations thereto have been put into effect. The Committee is of the opinion that the system of supervision would be improved if there were added a few district superintendents at large, for the purpose of supervising special activities and for the carrying on of experiments under the direction of the Board of Superintendents. Suggestions are made for the purpose of creating standards and of determining whether the work of the District Superintendents cannot be improved. The committee believes that the salary schedules are not such as to attract competent men teachers. The committee is of the opinion that the Board of Superintendents should establish a system that will permit the efficiency of principals and teachers

to be defined according to standards; and should, if necessary, define such standards. It believes that there should be comment in all reports setting forth the reasons why a teacher or principal is or is not satisfactory, in any given respect, and that in cases where the teacher or principal is defective, the marking official should certify what efforts have been made to improve the work of such teacher or principal. The committee believes that the custom of fixed, detailed qualifications for the position of district superintendent would be unfortunate and that it would tend to develop a class who would train to meet such qualifications and not broaden along general and original educational lines. Suggestions from district superintendents, principals and teachers are now welcomed by the Board of Superintendents. The members of the Board of Superintendents should be freed from purely administrative details such as appointment and transfer of teachers, etc.

The Special Committee on methods of the Board of Examiners is considering that part of the Elliott report dealing with the Board of Examiners

4. Reply of the Association of District Superintendents of New York to certain findings and recommendations of Professor Frank M. McMurry and Professor Edward C. Elliott. Prepared by a committee and edited by Dr. Joseph S. Taylor, District Superintendent.

5. Reports on Goodnow-Howe Report on Organization, Status and Procedure of Board of Education:

   a. Report of Special Committee concerning status of the Executive Committee of the Board—(May 13, 1914—Minutes—Board of Education.) (Resolution adopted "that the Committee on By-Laws be requested to consider and report to the Board of Education the matters upon which final action may be confided to the Executive Committee, as distinguished from those upon which action is required by law to be taken by the Board itself, to the end that a valid and orderly procedure may be followed in the devolution of business upon the Executive Committee for the convenience of the Board and the better administration of its affairs.")

   b. Report of Special Committee on Goodnow-Howe Report—that part dealing with the physical side of school buildings—(June 10, 1914—Minutes.) (Recommends that work now supervised by Committee on Care of Buildings and supervision of janitors be taken over by the Committee on Buildings and Building Bureau.)

   c. Report of Special Committee on certain recommendations in Goodnow-Howe Report regarding the Secretary's office—transfer of secretarial work of committees to various bureaus; and preparation of minutes of the Board of Education—(June 24, 1914—Minutes.)

   d. Report of Special Committee on Goodnow-Howe Report relative to the size of the Board of Education—(Minutes—Nov. 25, 1914—(1) and December 23, 1914—(2). (1) Favored a reduction in the number of members of the Board of Education—Report laid over. (2) Resolution adopted that the Board of Education, without expressing an opinion regarding the resolution presented by the Special Committee, request said Committee to present to

the Board of Education a full and comprehensive plan for the proposed establishment of a smaller Board of Education.

e. A Report on the Organization of the Board of Education and its Committees, prepared by Division of Reference and Research (Bulletin No. 10). The sequence of topics in the Goodnow-Howe Report afforded a guide in discussing the organization of the Board.)

NOTE 1—The matter of the reorganization of the Board of Education and its Committees is now being considered by the Executive Committee as a Special Committee.

NOTE 2.—In accordance with a recommendation of the Goodnow-Howe report that "a central reference and information division" be established, the Division of Reference and Research has been organized. The work of the Committee on Sites is done in co-operation with this Division. A study of population and conditions incidental and necessary to the proper location of school premises is now being made.

6. Report of Special Committee on estimating for budget purposes the number of teachers needed for elementary schools. (Relative to plan suggested by Dr. Bachman in School Inquiry Report.) Minutes, Board of Education, June 10, 1914.)

7. Reply by the City Superintendent of Schools to the report made by Dr. Bachman: "Overage Children in Public Schools." (Presented to the Board of Education, October 9, 1912—Document No. 7, 1912.)

8. Report of Special Committee appointed to consider Dr. Bachman's report on part-time conditions. (Presented to the Board of Education, September 10, 1913, Document No. 9, 1913.)

9. Report of Special Committee appointed to consider Dr. Bachman's report on "Promotion, Non-promotion and Part-time." (Minutes, Board of Education—April 28, 1915.)

NOTE:—"Many of the recommendations have already been enacted into by-laws; the conclusion that on the whole, children promoted at the end of the Feb.-June, 1911, term, were the pupils who should have been advanced, is probably indicative of the general tendency toward careful promotion and should be regarded as a partial answer to the criticism of forced promotion; the adjustments in curricula are already under consideration in various forms; the suggestion that some data be collected to form the basis of understanding the conditions most favorable to a maximum rate of promotions has been referred to the Division of Reference and Research; the problem of over-sized classes as a factor in promotion is already being attacked from two angles, namely, that of the Ettinger part-time plan, and the experiment under the guidance of Mr. Wirt; the problem of absence as a factor in non-promotion is at present better cared for owing to the reorganization of the Bureau of Attendance; the provision of special E classes for pupils two or more years over-age depends upon further investigation as to the extent to which the over-age of pupils is due to late entrance, and to the extent to which it is due to slow progress. At the present time lack of funds would interfere with the prosecution of this form of work. The suggestion that C classes be provided for the instruction of pupils unable to use the English language, particularly for pupils in the 1A

grade, should be met in so far as financial ability permits. Part time is shown to be but a slight factor in increasing the number of non-promotions, and the expansion of the Ettinger part-time classes does probably serve to aid the remedying of the decrease of part time to no slight extent. It is desirable, however, that, in so far as may be possible, full-time instruction should be given to all children, with fewer pupils to each class in order that the maximum educational progress may be attained."

10. "Material for Arithmetical Problems", a report prepared by the Division of Reference and Research in accordance with a recommendation of the School Inquiry Committee that "a study be made of the social life of all types of children, to determine the material available for problem work." (Bulletin No. 2.)

    NOTE:—The bulletin contains problems that reflect local conditions, express real situations or otherwise appeal to children's interests and experiences; indicates the problem that is purposeless, and gives a list of subjects which offers abundant material for problems.

11. Report of the Special Committee appointed to consider Dr. Goddard's report on ungraded classes—(Presented to the Board of Education, March 11, 1914, and May 27, 1914—Document No. 7, 1914.)

    NOTE:—The recommendations embodied in the Goddard report have been given careful consideration; many of them were similar to measures which the Board of Education was considering toward the same end. Many of these measures have since been enacted into the By-Laws.

    The Committee on Ungraded Classes has held conferences with such persons and organizations as have had practical experience with the type of child cared for in ungraded classes. The Committee also perfected a plan which embodies the following features:

    a. Co-operation of the Department of Ungraded Classes with the departments of the city government that share in the discovery and treatment of mental defectives.
    b. Provisions for the training of teachers for ungraded classes.
    c. The establishment of industrial schools for boys and for girls of appropriate age and mentality, and of an agricultural school for boys.
    d. Provision for special supplies and equipment for ungraded classes.
    e. Provision for an increase in the administrative staff of the department of ungraded classes.

12. The Committee on Studies and Text-Books reported on the portion of Dr. McMurry's report relative to the course of study. (The report closes with the statement: "The critciism of the course of study as made by Dr. McMurry were largely recognized by the Board of Education itself, and under its initiative practically all the recommendations to be found in his report have already been adopted in principle and spirit or are being crystallized in the courses o fstudy now under revision." (Minutes, Board of Education—May 27, 1914.)

    NOTE:—New courses of study have been adopted in arithmetic, history, civics, music; physical training course has been modified; prevocational courses have been established in the 7th and 8th years and a uniform system of penmanship has been introduced.

13. Amendment to report of Committee on Studies and Textbooks of date May 27, 1914—retechnical grammar. (Minutes, Board of Education—June 24, 1914.)

14. Report of Committee on High Schools and Training Schools on Dr. Ballou's report on "Problems in Organization and Administration of High Schools." The report concerns itself with

    The size of sections
    The work of chairman of departments
    The work of other teachers
    Administrative control in relation to internal organization
    Estimating the need of high school teachers

The report states that numerous constructive suggestions of Dr. Ballou's report have been given the consideration that they merit; that many of the recommendations in Dr. Ballou's report are already in practice in the high schools, and others with which the Committee would be glad to concur, are impossible because of lack of funds. Report referred to Board of Superintendents for such action as seemed necessary. (Minutes, Board of Education—June 24, 1914.)

15. Report of Committee on High Schools and Training Schools relative to certain items indicated in School Inquiry Report, concerning which it was recommended that further investigation be made; report was submitted on the size of sections in high schools, teaching periods, number of curricula. (Minutes, Board of Education—Jan. 27, 1915.)

NOTE:—Regarding teaching periods, "everything is being done to establish closer equalization of conditions wherever practicable."

Special courses have been introduced in high schools having the general course of study. A commercial course has been adopted which may be given in any high school having the general course, and a course in domestic science and art has been adopted for girls in any high schools.

A committee of high school principals, appointed to take up the matters, has presented a report upon instruction of first-year pupils, the organization of sections, the methods of teaching, the attention given by the teachers to the special needs of the pupils, and the adaptation of the work to their several abilities. (Included in Report on High Schools—16th Annual Report of the City Superintendent of Schools, for the year ending July 31, 1914.) The plan presented is now under consideration by the High School Principals' Association for revision.

16. Report of the Special Committee appointed to consider Dr. Thompson's report on Commercial Education. (Presented September 30, 1914—Document No. 10, 1914.)

NOTE:—A commercial course has been adopted which may be given in any high school having the general course.

Stenography has been introduced experimentally as an elective in the first year of the commercial course of one high school.

Teachers have been assigned as co-ordinators or field agents to aid in the establishment of co-operative relations with business houses. Practice work has been secured for "commercial students" in business houses and in the offices of the Department of Education.

Continuation classes in elementary subjects have been established in department stores.

During the past year, through the co-operation of the Chamber of Commerce, lectures have been given at the high schools by business

men and city officials, and opportunities have been offered teachers and students to visit various business establishments.

A "Commercial Club" has been organized to provide for meetings of business men and teachers for the purpose of discussing problems of commercial education.

17. Report of Special Committee appointed to consider Dr. Bachman's report on Intermediate Schools. (Minutes, Board of Education—July 23, 1913.) (Report is in accord with Dr. Bachman's view that differentiated courses should be established in the 7th and 8th years.)

NOTE:—Such courses have been established.

18. Report of Committee on Vocational Schools and Industrial Training relative to Dr. Schneider's report on Vocational Schools. (Minutes, Board of Education—June 25, 1913.) (Request to be made for funds to continue further along the lines approved in Dr. Schneider's report.)

NOTE:—Day continuation classes have been organized in department stores and factories.

Arrangements are being made for the establishment of co-operative classes. (Dr. Schneider is now serving in an advisory capacity.) The co-operation of employers has been secured.

Prevocational classes have been established in elementary schools, 7th and 8th years. (See Intermediate Schools Report.)

19. Report of Committee on Special Schools on Dr. Burks' report on The Compulsory Attendance Service. (Minutes, Board of Education—June 11, 1913, and July 9, 1913.) (Recommends consolidation of the work of the Permanent Census Board with the work of enforcement of the Compulsory Education Law.)

NOTE:—The Bureau of Compulsory Education, School Census and Child Welfare has been organized.

20. Report of a Special Committee on the Armstrong Report—relative to the creation of a department which would have charge of the installation, maintenance and operation of the heating plants; the operation of the janitorial cleaning force; the matter of fuel and janitors' supplies. Matter referred to Committee on Buildings, Committee on Care of Buildings, Committee on Supplies for a joint report on "the work and composition of janitors." (Minutes, Board of Education—Feb. 25, 1914.)

NOTE:—Concerning the utilization of school buildings considered in the Armstrong report, it should be stated that Superintendent Wirt, of Gary, Ind., is serving in an advisory capacity to the end that certain schools may be reorganized, under a dual system, so that the buildings may be used to their maximum capacity. "Compensation of janitors" is under consideration.

21. "Delays in the erection of public school buildings"—Answer of Committee on Buildings to the report prepared by C. G. Armstrong & Son for the School Inquiry Committee. (Presented to the Board of Elucation March 25, 1914—Document No. 3, 1914.)

22. Report of the Special Committee on Ventilation of Public School Buildings. (Minutes, Board of Education—May 27, 1914.) The Committee reports that from inspections made, it appears that the conditions of the temperature and purity of air have been improved. (The report recommends certain devices; it also states that under

the present method of supervision of janitorial service, it would be useless to install many of these. The report recommends that a new bureau to control engineering and janitorial matters be created.)

NOTE:—Tests of the character recommended by Mr. William J. Knox, Chemical Engineer, are being conducted—tests "toward reproducing within the schoolrooms the vital principal of invigorating outdoor air." Relative to the use of buckwheat coal, a recommendation made in the School Inquiry Report, it should be stated that several buildings are being equipped to test the practicability of using cheaper fuels.

The matter of the new bureau recommended is now under consideration.

23. A report made jointly by Committee on Buildings, Committee on Supplies, Committee on Care of Buildings, on recommendation that the work and duties imposed upon the Committee on Care of Buildings and the Supervisor of Janitors be turned over to the Committee on Buildings and the Building Bureau (Recommendation of Special Committee appointed to consider Goodnow-Howe Report.)

The joint report recommends that the bureaus having charge of the care, maintenance and operation of the school plant be reorganized to the end that these tasks may be centralized; it recommends that the Committee heretofore known as the Committee on Care of Buildings be known as Committee on Maintenance and Care of Buildings; that the position of Supervisor of Janitors be abolished and that a chief of operation an dmaintenance be appointed. (Minutes, Board of Education—Feb. 10, 1915.)

NOTE:—This report has been referred to the Executive Committee for consideration in connection with the report on the "Organization of the Board of Education and its Committees."

24. The By-Law Committee Report relative to the organization of a teachers' council. (Minutes, Board of Education—June 11, 1913, July 9, 1913.) The Committee considered (in conjunction with the Special Committee appointed to consider th ereport on "The System of General Supervision" by Professor Elliott) a plan for a teachers' council. Dr. Elliott's report recommended the creation of a supervisory council which should include the City Superintendent, district superintendents, a selected number of directors, as well as principals and representatives from the teaching staff. The Teachers' Council which has been organized, is an advisory council of principals and teachers.

B. NOTE CONCERNING THE RECORDS OF LEGAL DECISIONS COMPILED BY THE DIVISION

There has been prepared by the Division of Reference and Research a classified index of legal actions on salaries of teachers, janitors and other employees; actions for reinstatement; for damages; for injuries; and all actions brought by the teaching and administrative staff of the Board of Education from 1898 to

date. Wherever opinions have been rendered, a synopsis appears on a card under the name of the plaintiff in the action. In many instances there are synopses of opinions from the lowest to the highest court.

The information was obtained from the registers in the office of the Corporation Counsel, and from files in the Board of Education.

The continuity of the index is provided for by periodic examinations of the registers in the Corporation Counsel's office. A daily examination of the Law Journal is made and the disposition of Board of Education cases is noted on the proper cards.

The index is alphabetically arranged, and a classified key index of about 2,500 titles provides such a system of subdivisions and cross references that ready access may be had to any desired case. There are about 1,500 cards in the alphabetical index under titles of plaintiffs in the various cases.

In addition to actions against the Board of Education, cases or opinions having some collateral bearing on matters which might affect Board of Education actions have been included in the index.

A digest of opinions, which will be arranged according to the points decided in the several cases, is being prepared. This will be treated in the same manner as the general index—a card for each point, such as "Mandamus," "Jurisdiction," "Tenure," etc. The key index, as in the main index, will give the name of the case.

B

COMPILATIONS AND REFERENCES TO VARIOUS REPORTS ON EDUCATIONAL PROGRESS

I. KINDERGARTEN AND ELEMENTARY INSTRUCTION

A. Aiding Elementary Teachers to Understand the Kindergarten—A New York Experiment

The Brooklyn Women Principals' Association, during the past year, has considered among other subjects the matter of the relation between the kindergarten and the 1A classes.

Believing that there will always seem to be a gap between the kindergarten and the school proper while kindergarten teachers do not understand the aims and methods of the school, and teachers in the school do not understand the aims and methods of the kindergarten, and realizing that while it is comparatively easy for kindergarten teachers to obtain instruction in primary methods, short courses in kindergarten procedure are rarely or never offered to teachers, Miss Emma L. Johnston, principal of the Brooklyn Training School for Teachers, and a member of the Association, conducted an experiment last spring for the purpose of giving 1A teachers the opportunity of making an intelligent study of the kindergarten.

District Superintendent James Edsall was requested to invite the 1A-grade teachers of the schools in his districts to take a course of lessons in kindergarten work at the Brooklyn Training School for Teachers. About twenty-five teachers accepted the invitation, meeting for six successive Monday evenings. Miss Ruth E. Tappan, head of the kindergarten department of the training school gave the instruction by means of lectures and practical demonstrations. The teachers of 1A classes handled the kindergarten gifts, engaged in kindergarten occupations and played kindergarten games. There was no attempt to induce the teachers to use kindergarten material or methods in the 1A grade. The instruction merely made clear the meaning of the several kindergarten activities.

B. Advanced Kindergarten Work in the Elementary Grades—A Boston Experiment

In Boston an experiment in doing advanced kindergarten work with primary grade children has been tried. On two

afternoons a week, forty-nine kindergartners, who volunteered their services, worked at this problem in thirty school districts, with the children of sixty primary classes.

The organization varied somewhat, but the most common arrangement was for the kindergartner to take one division of the lowest primary grade for the first hour of the afternoon session and the other division for the second hour of the session, reversing the order of the divisions on the second day. Occasionally her work was with only the lower divisions of the two first grades, and again it extended into a second grade.

Great freedom was allowed in the choice of activities and arrangement of the program, though at Superintendent Dwyer's request all the teachers gave ample opportunity for the free conversations familiar in the kindergarten, but often lacking in the primary classes, with their larger number and more formal procedure. Advanced gift and hand-work were used in most classes, the former for free construction and for number work, the latter for hand training and for free expression of experiences, drawing and paper cutting proving especially valuable in this work. Games were played, stories were told, and many delightful excursions were taken to woods, parks, farms and beaches, both stories and excursions furnishing rich supplies of material for conversations and expression through hand-work.

At the close of the year the sixty primary teachers were asked for reports and frank comments on the experiment. All but one reported favorably, many with enthusiasm. The chance that it gave them to work with smaller groups was greatly appreciated, and several reported specifically that this had resulted in having a larger number of children than usual ready to promote That the experiment had awakened intelligent interest among the teachers is shown by their questions: Could we arrange for conferences between kindergarten and grade teachers? Could primary teachers be given time for home visiting? Is there any way of furnishing instruction in kindergarden work, as a whole, to primary teachers in active service? Can the ideals of the kindergarten be made the ideals of the school? Can the grades be given a more flexible program?

C. A Course of Study in Grammar Based on the Grammatical Errors of School Children in Kansas City

The present day tendency of subjecting educational principles, theories and practices to scientific examination and scrutiny has resulted in many important studies and investigations.

One of the most recent and interesting is the study made, under the direction of Professor Charters, of the grammatical errors of the school children in Kansas City, Mo.

It was made, perhaps, in response to the criticism so long directed against grammar which holds that, as the function of grammar in the grades is to serve as an aid to correct oral and written expression, and as many of the rules of grammar taught are not broken by children, such rules ought not therefore to be included in the course of study.

The investigation was planned to find (1) what errors in the use of oral and written language forms, violating rules of grammar, were made by the children of the Kansas City elementary schools; (2) what rules of grammar were necessary in order to include and understand these items; (3) what items in the present course of study in Kansas City were included but unncessary, and what items should be included but were omitted.

The material was collected in the following manner. The teachers of all grades from the third to the seventh inclusive were directed to hand in to the principal the written work of their pupils for a period of four weeks. Such written work was to be that ordinarily done in the regular course of school work, in which the children would write freely and in which their errors would be revealed. No dictated nor copied matter nor work written after correction was to be included. No mention was to be made to the children of the fact that their papers were being collected for grammatical errors.

In the oral language the teachers were directed to carry note-books for five days of school and to jot down every grammatical error made orally in their presence. If the same error occurred more than once with or without the use of the same words, it was to be noted each time.

In addition to this, a third means was used for finding out what were the common errors. The teachers and principals were requested to state, in order of frequency, if possible, the grammatical errors which they believed to be most commonly made by the school children.

The errors were tabulated and percentages worked out. The following is a copy of table A, which gives the errors found in oral language:

TABLE A

THE WORKING LIST FOR ORAL ERRORS USED BY THE TABULATORS AND THE NUMBER AND PERCENTAGES OF EACH KIND OF ERROR

	ERROR	*ILLUSTRATION*	*Errors*	*Total Per Cent. Error*
1.	Subject of verb not in nominative case	US girls went	253	4
2.	Predicate nominative not in nominative case	They were John and HIM. It is ME	118	2
3.	Objective of verb or preposition not in objective case	She gave it to Martha and I	85	1
4.	Wrong form of noun or pronoun	SHEEPS—THEIRSELF. The problem WHAT is	106	2
5.	First personal pronoun standing first in series	ME and HIM	108	2
6.	Failure of the pronoun to agree with its noun in number, person and gender	Nobody can do what THEY like	20	0
7.	Confusion of demonstrative adjective and personal pronoun	THEM things	190	3
8.	Failure of verb to agree with its subject in number and person	There IS six. You WAS	831	14
9.	Confusion of past and present tenses	She GIVE us four. He ASK me	93	2
10.	Confusion of past tense and past participle	I SEEN. I HAVE SAW	1426	24
11.	Wrong tense form	ATTACTED; HAD OUGHT	294	5
12.	Wrong verb	Lay for LIE; AINT GOT; confusion of CAN and MAY, SHALL and WILL	732	12
13.	Incorrect use of mood	If I WAS in your place	20	0
14.	Incorrect comparison of adjectives	JOYFULLEST; BEAUTIFULER; MORE BETTER; WORSER	38	1
15.	Confusion of comparatives and superlatives	She is the TALLEST (of two)	9	0
16.	Confusion of adjectives and adverbs	He looked up QUICK. That THERE book	263	4
17.	Misplaced modifier	He ONLY went two miles	17	0
18.	Double negative	He ISN'T HARDLY old enough	632	11
19.	Confusion of preposition and conjunction	He talks LIKE he is sick	14	0
20.	Syntactical redundance	Mother SHE said so. Where is it AT?	593	10
21.	Wrong part of speech due to similarity of sound	I would OF KNOWN; THEY for THERE	41	1

The striking features about the list are its narrow limits, and the fact that errors in the use of the verb (errors 8 to 13) make up 57% of the errors. Other tables show further analysis and classification.

The written errors were carefully studied, inasmuch as such study acted as a partial check on the study of oral errors, and in the second place supplemented it.

Table B is the list of errors in written work. It contains all the classes of oral errors listed in Table A with some additions.

TABLE B

THE WORKING LIST OF WRITTEN ERRORS USED BY TABULATORS AND THE NUMBER AND PERCENTAGES OF EACH KIND OF ERROR

	ERROR	*ILLUSTRATION*	*Totals*	*Per-cent.*	*Per-cent. of first 21*
1.	Subjective of verb not in nominative case	US girls went	42	0	1
2.	Predicate nominative not in nominative case	They were John and HIM. It is Me	49	0	1
3.	Object of verb or preposition not in objective case	She gave it to you and I	48	0	1
4.	Wrong form of noun or pronoun	SHEEPS—THEIRSELF	655	5	16
5.	First personal pronoun standing first in a series	ME and him	25	0	1
6.	Disagreement of noun and pronoun in number, person and gender	I saw a man WHICH	162	1	4
7.	Confusion of demonstrative adjective and personal pronoun	THEM chickens	3	0	0
8.	Failure of verb to agree with its subject in number and person	You WAS. He DON'T	753	6	19
9.	Confusion of past and present tenses	She GIVE us four. He ASK me	474	4	12
10.	Confusion of past tense and past participle	I HAD WENT. I SEEN it	188	2	5
11.	Wrong tense forms	I CLIMB a tree. They DRUG the road	198	2	5
12.	Wrong verb	SET for SIT, LAY for LIE, LEARN for TEACH. Confusion of CAN and MAY, WILL and SHALL	265	2	7
13.	Incorrect use of mood	If I WAS in your place	61	0	2
14.	Incorrect comparison of adjectives	WONDERFULLEST—MORE BETTER	12	0	0
15.	Confusion of comparatives and superlatives	BEST (of two)	8	0	0
16.	Confusion of adjectives and adverbs	This HERE book. Do that quick	253	2	6
17.	Misplaced modifier	I ONLY have one	225	2	6
18.	Double negative	I CAN'T see NOTHING. AREN'T I HARDLY any	58	0	1
19.	Confusion of prepositions and conjunctions	He talks LIKE he is sick	53	0	1
20.	Syntactical redundance	Papa HE said I might	467	4	11
21.	Wrong part of speech due to similarity of sound	TO (TWO, TOO); THERE (THEIR)	1334	11	
22.	Failure to put period at end of statement		3600	30	
23.	Failure to put question mark at end of question		208	2	
24.	Failure to put apostrophe to denote possession		744	6	
25.	Omission of subject		313	3	
26.	Ommission of predicate		297	2	
27.	Confusion of dependent and independent clauses		1059	9	

• Parker; Methods of Teaching in High Schools, p. 404.

The second part of the study takes up the question of selecting upon the basis of these errors the grammatical rules to be taught. The table of errors was changed to a statement of the rules broken. These rules, it is concluded, should form the core of the course in grammar. To understand these rules, other rules and definitions must be studied, and accordingly these are added to the complete list; for instance, Rule 1, The subject of a verb is in the nominative csae. "This involves a knowledge of *subject* and *predicate* and, therefore, of the *sentence*. *Subject* involves a knowledge of *noun* and *pronoun*. Nominative case includes case and nominative case in pronouns. Predicate involves the use of the *verb*."

The study in its third part compares the course of study in Kansas City as at present constituted with one based upon the errors of the children and shows what omissions and additions would be made necessary.

The question of saving time in the elementary school period, of eliminating existing waste, is a very important one. Economy can be effected "by the elimination of non-essential subjects or subject-matter, and by including only such additional significant material as is clearly vital in realizing the ends of elementary education." Studies of the kind described are very essential in order to determine upon the basis of fact the subject matter that is essential or non-essential. It may be that courses of study will, in the future, be made up under the guidance of such relatively exact information, rather than under the influence of personal impression or opinion.

II. SECONDARY INSTRUCTION

A. The Junior High School and the Six-and-Six Plan

Reference has already been made to certain figures indicating the loss of pupils in high schools during the earlier part of the course. This condition is not peculiar to any one place.

Among the various methods for influencing pupils to continue their schooling, as well as for gaining certain other advantages, there has been proposed a change in organization by which the elementary school course would be reduced to six years, and by which six years would be devoted to high school instruction. Usually it is proposed that the first three years of this second six-year period have an organization of their own; to this organization is applied the name of "junior high school."

Correspondence on file in this Division indicates that the six and six plan, or the six, three and three plan is being considered in many cities and towns and in some is in successful operation.

The six, three and three plan has been recommended for two reasons: for its administrative advantages, and for its better adaptability to the needs of pupils between the ages of twelve and sixteen.

It is claimed that junior high schools may be more readily distributed, in some cases being housed in elementary school buildings. Thus, there would be no real break between them and the elementary schools, no more than there now is, for example, between the 6B and the 8B school.

For the pupils the argument is advanced that the seventh, eighth and ninth years of schooling require a greater variety of content and a better sort of adjustment than the elementary course affords.

Mr. C. M. Merry, principal of the Madisonville High School of Cincinnati, in a letter to the writer, states that the six and six organization has been in operation in Madisonville two years with results that are highly satisfactory. There are special classes and provisions for three types of pupils, retarded, normal and advanced.

In Document No. 39 of the Council of Education of the State of New Jersey, further reasons are offered for the establishment of a junior high school. A selected bibliography of the subject is included.

Bulletin No. 12, 1914, published by the Superintendent of Public Instruction of the State of Michigan, recommends that the high school be organized to embrace the seventh, eighth, ninth, tenth, eleventh and twelfth grades. The advantages of dividing the schools into six elementary grades and six high school grades are summarized as follows:

The six-year organization will give to boys and girls during the critical period of the seventh and eighth grades equal opportunities with those of high schools.

The pupils will be given early opportunity to exercise some choice as to the group of studies they wish to pursue, the teachers and parents, of course, directing the pupils' selections.

Placing the seventh and eighth grades on the high school schedule will make it easy to promote pupils by the subjects they have passed rather than by the passing of grades.

Pupils will be placed early in the high school environment and, thus started into work of their choice, will be less liable to leave school.

It is rare that a pupil in the present high school can shorten his course by doing four years of work in three. In the six-year high school, however, it will be quite feasible for the stronger students to plan on doing the work in five years, thus gaining a year without lowering the quality of the work or jeopardizing the health of the students.

It would be possible to provide more new teachers and a more efficient type of instruction due to the employment of specialists.

Courses of study for the Michigan High Schools, suggested in the bulletin, include "literary," agricultural, household arts, and commercial courses.

B. Studies and Reports on English by Associations or Committees of High School Teachers of New York City

Similar to the University of Missouri study concerning grammar though on a somewhat smaller scale, is the report of the

committee of high school teachers of English of this City, appointed by their association to study the work of English composition in grammar schools and in high schools. The section of this report that relates to the types of errors commonly found, states that the principal general errors noted in an examination of over one thousand papers of different kinds written by grammar school pupils, were:

a. Lack of sentence recognition
b. Lack of paragraph recognition
c. Lack of power to apply simple grammatical principles to written expression

The classes of errors found in the answer papers of a uniform test given to four hundred grammar school children entering high school were as follows:

Bad paragraphing	55%	of papers
Poor sentence recognition	33%	" "
Inaccurate in reproducing facts	88%	" "
Grammatical errors	68%	" "
Misused tenses (included in above 68%)	22%	" "
Error in use of words	23%	" "
More than one mistake in spelling	70%	" "
Deficient in punctuation	18%	" "

Of five hundred letters examined,

321 were perfect
97 evinced bad form
77 were faulty in grammar
19 had no heading
17 had no address
11 closed with "Truely"
30 closed with "Sincerely"
37 were badly capitalized
81 had no date

BULLETINS

The principal feature of a recent bulletin of the Association of High School Teachers of English of New York City (Bulletin XVI, May, 1915), is the report of the Committee on Co-operation, which makes the following recommendations:

English Teachers

To the English teacher we recommend that he continue to employ the methods whereby he has tried to spread the effects of his teaching over his pupils' life; such as (a) assigning themes from the subject-matter of other courses taken in school, (b) introducing subjects from every-day life with the purpose of impressing the student with the idea

that English is a tool for use as well in every business and profession as in every school department, (3) convincing students of the English teacher's interest in their habitual use of the mother tongue by inquiring from other teachers of the work done in history, science, and so on, and by reading and criticising such papers and notebooks occasionally, (d) considering special problems which confront the pupil in preparing his work in other departments (such as a history outline or the record of an experiment in science and giving him proper training therefor, and (e) wherever it is practicable, taking at frequent but irregular intervals whole sets of papers in other subjects in lieu of composition assignments in the English class.

Other Teachers

To the teacher of another department desirous of co-operating with English teachers to secure better written and spoken English from his pupils, we offer the following list of specification as a definition of the uniform standard to which pupils are expected to measure up. We should like to emphasize the suggestions concerning oral work. Co-operation should not be restricted to noting violations of good usage. It should aim to develop the most effective use of language possible. The effort should not stop short of connected discourse. The boy or girl will never think with perfect clarity until he or she learns to express ideas in lucid language.

Suggestions for Co-operation

In Oral Work

1. Insist on clear speaking. The student should stand erect, with head up, and speak with sufficient clearness to be understood in all parts of the room.
2. Insist on exactness. Require that the answer match the specific questions asked. Do not say, "I know what you mean. It is this way." Lead him to employ words that will express his meaning with some approach to precision.
3. Insist on full answers. Resist the temptation to accept piecemeal replies. Where such a regulation is not too artificial, frequently require the pupil to explain in complete sentences what he means. Encourage the pupil so to organize his material that he can speak two or more minutes in elucidation of his ideas.
4. Insist on correctness. Do not accept "ain't" for "isn't", "don't" for "doesn't", "this here", "those sort", or similar ungrammatical or unidiomatic expressions. Be careful to secure the proper use of the tenses, especially of the present tense.

In Written Work

1. Require the uniform heading. The faculty in each school should reach an agreement concerning the heading to be required of all pupils in all their written work.
2. Insist on neatness, in both handwriting and arrangement.

3. Require correct spelling, not only of words in your subject, but of all common English words. To call attention to such errors will not be sufficient unless the pupil is made to feel that he cannot safely repeat the error.
4. Insist on clear sentence structure. Sprawling or incoherent sentences should be pointed out to the student. He will soon learn that he must exercise the same care in his other writing that the English teacher exacts in his themes.
5. Require such punctuation as will make the sentence clear at a single reading, especially the proper use of the period and the question mark. The faculty might well agree on a few of the important rules for the comma to be enforced in all writing.
6. Reject summarily all reports, papers and notebooks obviously deficient in the elements of decent English and good form noted above.

It is further recommended that the principals promulgate the following rule for all examinations in subjects other than English:

"On all papers marked sixty or above the teacher grading the paper shall give an additional credit, up to five points, for notably good English."

Recommendations applying to particular departments are also made, in the hope that teachers of other subjects will find in them guidance in their endeavors to co-operate with the English department.

The report includes a copy of a notice issued to his teachers by the principal of the Boys' High School of Brooklyn:

"As a means of strengthening the pupil's English and increasing his mastery of all subjects studied, teachers and supervisors in this school will please remember that they are expected to INSIST on:

1. Accurate use of words.
2. Co-ordination between question and answer.
3. Fluency and completeness of statement.
4. Logical arrangement of thought.
5. Respectable oral English from both teacher and pupil.
6. Respectable written English, including form, spelling, and the use of technical marks of punctuation at least.
7. Marking down any work notably deficient in English.
8. Referring written work notably deficient in English, when such is found in departments other than English, to the pupil's English teacher.
9. The official school heading for written exercises.

Teachers are also urged to raise any examination paper rated 65 per cent. or above on substance, at least 5 per cent. for notably good English."

A very interesting contribution is that of the committee which reported on a plan for teaching pupils to read books quickly and effectively. An outline is presented which includes,

under "Exercises for increasing the speed of reading any book":

a. Consideration of kinds of books
b. Consideration of kinds of reading

under "Exercises for increasing the speed of reading any book":

a. Training in utilization of typographical aids
b. Training in judicious skipping
c. Training in getting ideas from sentences, paragraphs, chapters, or other divisions of a book
d. Training in taking in whole phrases or sentences at a glance
e. Helping a pupil to discover his own verbal difficulties

under "Exercise for increasing the effectiveness of reading":

a. Fiction
b. Non-fiction

The Committee on Oral English makes the following recommendations:

1. That all high schools give an examination in oral English to pupils at the end of their first year to determine whether the speech of the pupils entering the second year is satisfactory.
2. That all pupils whose speech is below grade be given an opportunity to continue work in oral English until their speech is satisfactory.
3. That closer segregation for training school candidates be carried out when possible.
4. That the extra year of work in oral English, as recommended in the syllabus submitted by the elocution teachers for high school pupils of the second year, be incorporated in the high school course to obviate the long interval between the work of the first and fourth years.
5. That all pupils not in regular elocution classes be given grades in oral English by their English teachers as a means of emphasizing the importance of spoken English.
6. That the entire record of a pupil in oral English, as well as his standing in a final examination, serve as a basis to determine his senior grade in oral English.

A list of plays used by high schools during the current year, a list of recitations used recently by pupils, general suggestions concerning recitations disapproved by teachers, and suggestions for the improvement of public speaking and dramatics, are included in the report of the Committee on Public Speaking and Dramatics.

C. Bulletins of the Illinois Association of Teachers of English

The Illinois Association of Teachers of English publishes a monthly bulletin, copies of which are filed for reference in the

office of this Division. The following-named articles will be of interest to teachers of English in the high schools:

1. An experimental course in freshman composition for Illinois high schools. Bulletin—January 1, 1913
2. Report on the experiment in English composition. Bulletin—February 15, 1914.
3. Another word in English composition. Bulletin—October 1, 1914.
4. Memory work in English literature. Bulletin—November 1, 1914.
5. The teaching of the history of literature. Bulletin—February 15, 1915.
6. Contemporary literature in the high school. Bulletin—April 15, 1915.
7. The principles of business correspondence. Bulletin—May 15, 1915.

D. How High School Pupils in St. Louis Use Their Time

The report of the St. Louis public schools for the year ending June 30, 1914, contains a study relative to the "use of time by high school pupils."

Superintendent Blewitt remarks that "on the diligence of the pupils as manifested by their use of time, statements vary from one charging that no pupil of ordinary physical strength can stand the strain demanded by study exactions, to one declaring that high school pupils are a lot of silly youngsters who have no sense of obligation and who shun work as a disagreeable imposition." For the reason that the Superintendent desired not to let his opinion, with reference to the matter, rest upon impressions alone, the study was made.

The method of gathering the data was planned to avoid errors and to cover a field broad enough to give general conditions. At the same time of the day, approximately five hundred pupils, without previous notice, were asked to answer certain questions on a blank form provided.

The statistics show the time spent (a) in school activities, (b) in out-of-school activities, (c) in both; and cover (a) the

program in which all pupils participated and (b) special programs in which only part of the pupils participated.

In the analysis of the statistics, it is stated that the following are among the facts disclosed by the investigation:

1. The average amount of study in preparation of lessons amounted to a little over three hours a day, which with the recitation periods made an average of seven hours a day given to the required work of the school.
2. Optional extra session work was done by 592 out of 5,072 pupils. To this was given on an average five hours and forty-five minutes a week.
3. Nearly one-third of the pupils, 1,676 out of 5,072, gave to the school activities which were not required but voluntary, four and one-half hours a week, an average of an hour and a half for the whole number of pupils.
4. On an average, two hours and forty minutes a day were given by 894 pupils to some form of remunerative work.
5. The number of pupils taking private lessons in music, dancing and other subjects was large, 2,073, and the time used by them in this way amounted to more than five hours a week on the average for those taking such lessons, or of two hours a week for all pupils of the high schools.
6. In the amount of time per week given to social, church and other like activities by pupils of the various schools, there was a much wider range, from two hours and twenty-six minutes to nine hours and fifty-seven minutes.
7. The amount of time per week given by pupils of the various schools to all out-of-school activities varied in the different schools from eleven hours and five minutes to nineteen hours and eight minutes.

E. The Study Period

1. Present tendencies in the supervision of study

The proper direction of study is claiming the special attention of many principals and teachers. "Educational Administration and Supervision," April, 1915, in an article on "present tendencies in supervised study," includes the following summary of the various schemes of supervised study now employed throughout the United States:

a. *"The usual assembly hall method* with one or more persons in charge, these persons being either the principal, a regular teacher, a special study-hall teacher, monitors or persons selected by student government.

b. *"The various conference plans,* stated and appointed, conducted either by the principal or each teacher or by teachers assigned for this purpose and held at various hours of the day, immediately

before and immediately after school being the usual time, such conferences being also in many cases limited to only one or a few subjects.

c. "*Supervised study for each subject once a week,* directed usually by each teacher of the subject, but in some cases in charge of a specially assigned teacher. This plan is well developed in Dekalb, Illinois.

d. "*Each recitation divided between reciting and study,* either half and half, as in Newark, N. J., or a flexible amount of time for each method, or a double period, as especially evolved in Joliet, Ill. In this plan a great deal of time is spent on the assignment, and the whole recitation is a blend of hearing lessons and teaching pupils how to study the lesson just assigned, the greater part of the time, however, being devoted to the latter. In Joliet, where the double period is employed, the first forty minutes are spent in reviewing the previous day's work, and in presenting new material. In other words, the first period is given over to various lesson types, but the second period, immediately following and just as long, is entirely a study lesson. The teacher gives attention to every pupil requiring special treatment. The teacher does not wait for the pupils to call on her, but she visits each desk, and when she discovers that the pupil is employing the wrong method, a quiet conference or individual lesson is then given, the other pupils in no way failing to observe discipline. In Joliet this method is used in mathematics, the modern languages, history and the sciences during the first two years.

"In Columbia, Mo., there is only a minimum of recitation, the greater part of the time being devoted to the pupil's individual work, various problems, many of them pertaining to local interests, being treated by pupils working in groups. Reports are read to the class and then discussed and criticised.

e. "*The study-coach or unassigned teacher.* According to this plan one teacher devotes all of her or his time to the supervision of study. Although somewhat similar in general method, there is a slight difference between a study-coach and an unassigned teacher.

(a) The study-coach has an office where pupils may have conferences throughout the school-day on the difficulties met with in all of their work. Without destroying initiative, the study-coach guides the pupils in the selection of right methods of work, helps them to discover their weaknesses and emphasizes points that in the class are either taken for granted by the teacher or in the midst of other details easily overlooked. The study-coach is able to obtain from the pupils a more frank and thoroughgoing admission of inability than is possible or perhaps advisable in a large class. By keeping a record of the various types of difficulties met with in the various subjects without, however, repeating the more personal confidences necessary in this type of supervision, the study-coach can give to the several teachers important criticism on teaching methods.

(b) The unassigned teacher has duties somewhat more uniform. As illustrated in Newton, Mass., the unassigned teacher has regular hours at which pupils of different

types of difficulties meet for special assistance. At nine o'clock, for example, a group of boys retarded by long absence on account of illness, and consequently entitled to additional help, are sent to the unassigned teacher for coaching until their progress enables them to rejoin their class. At 10 o'clock a little girl having difficulties with arithmetic is given a private lesson. At 10:30 an older girl ahead of her class, but not quite ready for promotion, is coached on the few necessary points that will fit her for the next class. In this way the unassigned teacher is busy throughout the day. Various types of difficulties are treated in groups. Each child is given clinical treatment, records kept of the difficulties, the time needed for this extra work, etc.

f. "*The eclectic plan,* by which various types of study supervision are included in the general supervision. In English, for example, the study period once a week is used; in algebra, the divided period. This choice of methods is left with each teacher. Cairo, Ill., is a striking example of this plan.

g. "*The occasional supervision of study* for retards or those deficient in class standing is common. At first this seems economical and sufficient. It is, however, the usual practice of helping the failures, of curing instead of preventing. In place of being really a help, it is a hindrance. Some failures, to be sure, are unavoidable, as in sickness, but other failures due to difficulty of the subject or to lack of application and interest can be prevented by a well organized system of study supervision as part of the regular day's work."

It is difficult to get adequate records of the results of supervised study. However, some of the principals who have had experience with the method believe that:

"(1) It saves time; (2) prevents waste of energy; (3) makes for definiteness; (4) allows leisure for extra school work, family life, athletics, music, art, reading, social and religious activities without neglecting school work; (5) teaches children how to use their minds; (6) gives pupils a working day the same as people generally have; (7) aids discipline by keeping the child active all the time; (8) reduces the reiteration plan of recitation to a minimum; (9) makes the classroom a live workshop; (10) inspires pupils to study because they know how; (11) provides an atmosphere of study—'everybody's doing it;' (12) brings about a better mutual understanding between teacher and individual pupil; (13) because of better prepared lessons it relieves the teacher of the sense of failure in her teaching; (14) reduces the amount of home study in the grades and the first two years of high school."

The periodical named above also gives a description of an experiment in supervised study carried on in the Kansas City High School.

2. THE NEWARK PLAN

Dr. Corson, First Assistant Superintendent of Schools in Newark, considers the study period in his report on high schools for the year 1913-14. "There was a time," he writes, "when the preparation of lessons received little attention from teachers. Lessons were assigned, and it was assumed that the students possessed the ability to make the requisite preparation and a motive sufficiently strong to cause them to do it. When the work was less highly specialized, this was satisfactory, but the changing conditions in our social life and the increasing demands made upon students caused a well-defined public sentiment against what came to be called 'too much homework.' The solution of the problem was the introduction of the 'study' period as a feature of school programs. There are thirty periods a week. Twenty periods of prepared work are sufficient for a normal pupil. The remaining periods are used for music, laboratory, gymnasium and *study*. During the study period, a number of pupils are together in one room, sometimes as many as seventy-five, or other times as few as forty, or thereabouts. It is entirely clear that with such a number of people in one room there are always distracting stimuli. Young people are weak in their ability to concentrate their mental powers, particularly under such temptation as the study period affords. The subject studied makes a slight difference as to the success or failure of the period. Mathematics may be profitably studied under such conditions, for there can be no deception. There is tangible evidence that the pupil actually works. It is not so in all subjects. The pupil may have the appearance of working, but his mind may be otherwise engaged than with what he is supposed to be studying."

Dr. Corson believes that because of this fact, the "study period" is a delusion, and its value below the third year may rightly be brought into consideration. In one of the Newark schools a plan of "study conference" has been introduced.

As a substitute for the usual study period, there is a lengthened recitation period in which a portion of the time is given to recitation and the remainder to study with the teacher, or to individual help by the teacher. Dr. Corson adds, "The Teacher

should teach the children how to study, should study with them until they know how, and should conduct the recitation so that it is more than a lesson-hearing exercise. Such recitation should be devoted to an investigation of the lesson, to the process of relating it to what has preceded it, to the mastery of it. It should not be so much the reproduction of a memoriter attainment as the search for sequence, relationship, ability or purpose. After this, the pupil may rightly be held responsible for holding the facts in memory, for correct inferences based thereon, and for valid judgments to be discovered by reasonable tests. Such a change as is here contemplated would make every recitation a study period, and that which is now so designated would be relegated to oblivion. The work given to pupils for home study would be such as they can do. To prevent it from being too great in quantity, weekly conferences of teachers of the same grades should be held wherein the prospective lessons for the following week could be planned. In no other way can the quantity of homework be properly regulated."

3. THE WALTHAM PLAN

In Waltham, Mass., the necessity of providing for and enforcing more study on the part of high school students has resulted in a plan of holding an afternoon session at which students, whose opportunities for study at home are inadequate, or whose defective preparation of lessons shows that they are not making adequate use of those opportunities, may come to the school and study under the supervision of teachers.

4. THE ABOLITION OF HOME STUDY IN SACRAMENTO

In the elementary school of Sacramento, Cal., home study has been abolished. The Superintendent believes that to know how to study is more important than to know how to recite, and that this part of a child's training should be accomplished under the direct supervision of the teacher and should not be left to the home where conditions are seldom right for the work. In preparing a lesson schedule, therefore, it is necessary to find

time for study periods for each subject needing preparation. In doing so, the "traditional amount of time devoted to each subject per week has been reduced by the addition of study periods and subjects for general training, but the reduction is more than made up by intensive preparation, or study, under the direction of the teacher."

5. LEARNING TO STUDY

The School Review of June, 1914, contains a few suggestions on learning to study. The writer says that learning without plan is as ineffectual as teaching without plan. Cloudy, approximating notions on the part of the learner arrive at the same results as do similar notions in the mind of the teacher.

First of all, a student should seek to *understand*. He should be encouraged to be honest with himself; he should be taught to discriminate between what he knows, what he thinks he knows, and what he is sure he does not know. Haziness of understanding leads to guessing, but not to clean-cut intellectual insight that will eventually be fruitful. The social efficiency of the schools will never be enhanced by a spirit that allows and encourages habits of carelessness and slovenliness in the workmanship by either mind or hand.

The second step in studying is to *systematize* the material, or to give *proper relationship* to it. To do this is an extremely exacting business, yet one unusually rich in its mental reward. It is an exercise that tests the student's sense of relationship, proportion, and values. It cultivates in him decided habits of reflection which will set him above his fellows who look upon studying and reciting as affairs of memory only.

After understanding and systematization comes *association*. In order to enrich his knowledge, the student should be taught to bring the newly acquired material into a large and vital relationship with other matter of a similar kind. The teacher should make the student see that knowledge without proper relationship to other knowledge is generally sterile and useless.

Last of all, there should be the *remembering* or *appropriating*. It is well in this day when teachers are absorbed with the notion

of developing intelligence by so-called problem questions not to lose entire sight of the memory. The world of affairs not only wishes men who can think, but it also wishes men who can remember.

Let the student, then, in his preparation of work, feel the importance of understanding, systematizing, associating, and remembering, and he will soon find his mental efforts taking on a new interest and himself rapidly growing independent of his teachers.

("On Learning to Study; A Few Suggestions"—Hiram B. Wilson.)

6. THE USE OF STUDY-HALLS—AN INVESTIGATION MADE BY MISS ELLA A. BUSCH, OF ERASMUS HALL HIGH SCHOOL

An interesting study of the use of the study-hall by high school pupils has been made by Miss Ella A. Busch, an instructor in Erasmus Hall High School. The use pupils make of the time they spend in the school study-period is a real problem not only from the point of view of the administrator and the study-hall teacher, but also from that of the pupil himself.

Miss Busch's study is based upon definite observations of the manner in which a number of pupils used their study-periods between September 29, 1914, and May 7, 1915. Fifty pupils in groups of five were observed on ten different days, during study-periods forty-five minutes long, in large and small study-halls. Four observations were made, each five minutes long, a record being made every thirty seconds. A pupil was marked inattentive when obviously not attending to legitimate study-hall duties. The doubtful cases in one direction were balanced by the doubtful cases in the opposite direction.

The average number of recorded instances of inattention for the ten days are given in the following table, which is a modification of an original table.

Average Number of Recorded Cases of Inattention for the 10 days

Boys, A to Y; Girls, A^1 to Y^1

Pupil	*Ave.*	*Pupil*	*Ave.*	*Pupil*	*Ave.*	*Pupil*	*Ave.*	*Pupil*	*Ave.*
a	5.55	k	.68	u	.83	f^1	.78	p^1	.25
b	3.08	l	4.33	v	1.45	g^1	.73	q^1	3.00
c	2.23	m	2.63	w	3.78	h^1	2.40	r^1	.45
d	.31	n	2.98	x	1.93	i^1	1.88	s^1	7.30
e	4.635	o	1.63	y	.33	j^1	2.55	t^1	2.30
f	3.40	p	.40	a^1	1.05	k^1	1.6	u^1	.78
g	4.10	q	2.38	b^1	.73	l^1	1.54	v^1	.43
h	.85	r	2.24	c^1	2.00	m^1	2.07	w^1	1.08
i	.73	s	3.75	d^1	.88	n^1	1.2	x^1	1.00
j	1.78	t	.18	e^1	2.83	o^1	1.78	y^1	7.
								Average	2.28

The variation in attention in study-halls is shown by the following comparison of the records of the best ten pupils with those of the worst ten.

Comparison of Best Ten Pupils with Worst Ten in Study-Hall Conduct

		Best ten pupils										*Worst ten pupils*									
		d	i	p	t	y	b^1	g^1	p^1	r^1	v^1	a	e	g	l	w	e^1	j^1	q^1	s^1	y^1
Number of days out of 10 on which	no instance of inattention was recorded against	4	3	7	6	7	4	3	6	3	3	0	0	0	1	0	1	0	1	0	0
	one-half or more of the study period was wasted by	0	0	0	0	0	0	0	0	0	0	7	4	4	4	1	2	2	2	10	9
Number of five minute periods out of the 40	profitably used by	29	30	36	35	34	28	26	35	31	30	7	14	6	14	8	15	13	13	0	4
	totally wasted by	0	0	0	0	0	0	0	0	0	0	11	11	5	9	2	2	2	6	16	16

Four class teachers, *i.e.*, teachers to whom the pupils recited during either the first or the second term of the school year (1914-1915), were requested to rate their pupils on the following

traits: industry, initiative, attention, attitude and improvement. These traits were not defined, but each teacher was left to interpret the terms to his or her satisfaction, which fact introduces factors of variation and accounts in large measure for differences in the ratings of almost any one trait for any one pupil. The scale used for this rating was as follows: 95-100, excellent; 85-95, very good; 75-85, good; 65,75, average; 60-65, unsatisfactory; below 60, poor. Further comparison was made of the above ratings, with records of scholarship, the work of the first two years in English, language, mathematics, science and history and with records for the same period in absence and lateness. These comparisons are most interesting, but it is impossible to include all the tables within the limits of this article.

The ten students (five boys and five girls) who have the best study-hall record, *i.e.*, those having the least number of instances of inattention recorded against them, were ranked in the order of their merit, in the various traits and in scholarship, absence and lateness, with the following result:

Best Ten Pupils (Highest Rank—1)

Pupil	*Study hall*	*Industry*	*Initiative*	*Attention*	*Attitude*	*Improvement*	*Scholarship*	*Absence*	*Lateness*
d	3	4	3	3	5	4	3	9	10
i	8.5	3	1	5	2	5	4	4.5	1.5
p	5	5.5	5	4	2	10	5	6	8.5
t	1	8	8.5	10	9	8	6.5	3	6
y	4	9	10	8	9	7	10	1	1.5
b^1	8.5	1.5	4	1.5	1	1.5	1	4.5	1.5
g^1	8.5	10	8.5	9	8	8.5	8.5	7	7
p^1	2	1.5	2	1.5	2	1.5	2	2	1.5
r^1	7	7	6	6	6	6	8.5	10	5
v^1	6	5.5	7	7	7	3	6.5	8	8.5

"By inspection, it is readily seen that pupils d and p^1 maintain their places near the head of the group consistently throughout seven measures; pupils g^1 and r^1 show little deviation in rank at the lower end of the list; the close resemblances between the traits measured point to a very close relationship or correlation between them. We may judge that pupil t, who is seldom absent, finds it necessary to use his time in study-halls well, in order to

bring up his scholarship even to sixth rank, inasmuch as the ratings (given him by his subject teachers) in industry, initiative, attention, attitude and improvement are low. Pupil b^1 uses her study-periods badly and has not a great deal of initiative, which possibly accounts for her absence record, but ranks first in the other five traits. May we not judge that she has native ability and uses her recitation periods well."

Pupil y, who is seldom late or absent and makes fair use of his study-hours, is lacking in those characteristics which bespeak the satisfactory pupil.

The orders of merit of the worst ten pupils present interesting data:

Worst Ten Pupils (Lowest Rank—1)

Pupil	*Study hall*	*Industry*	*Initiative*	*Attention*	*Attitude*	*Improvement*	*Scholarship*	*Absence*	*Lateness*
a	3	2	4	2	3	2	1	2	4
e	4	7	5.5	6.5	7	1	4	7	1
g	6	10	10	10	10	10	10	5	5.5
l	5	6	9	6.5	6	8	6	9.5	5.5
w	7	3	3	3	2	4	5	8	5.5
e^1	9	8	7.5	8	8	9	7.5	3.5	5.5
j^1	10	9	7.5	9	9	6.5	9	9.5	5.5
q^1	8	5	2	5	5	6.5	1	1	2
s^1	1	1	1	1	1	3	1	3.5	3
y^1	2	4	5.5	4	4	5	7.5	6	5.5

In the case of pupil s^1, there is identity of relative position in the measures of study-hall conduct, industry, initiative, attention, attitude, and scholarship; that this student is ranked third in improvement is due in large part, no doubt, to the various interpretations given this term by four different teachers. Pupil g maintains tenth rank in six measures; pupils e^1 and j^1 vary only slightly in their respective places.

Thirty-six correlations (by the Pearson coefficient method) follow, to show the relation or mutual implication between the study-hall conduct of the fifty pupils and each trait mentioned, and between each two of the other eight traits measured.

Table of Correlations (by Pearson Coefficient Method)

	Study-hall conduct	*Industry*	*Initiative*	*Attention*	*Attitude*	*Improvement*	*Scholarship*	*Absence*	*Lateness*
Study-hall conduct	—	.572	.341	.429	.435	.224	.486	.019	.014
Industry	.572	—	.830	.934	.955	.880	.868	.013	.217
Initiative	.341	.830	—	.664	.685	.658	.693	.193	.180
Attention	.429	.934	.664	—	.857	.661	.758	.082	.011
Attitude	.435	.955	.685	.857	—	.711	.731	.043	.012
Improvement	.224	.880	.658	.661	.711	—	.718	.194	.235
Scholarship	.486	.868	.693	.758	.731	.718	—	.119	.311
Absence	.019	.013	.193	.082	.043	.094	.119	—	.453
Lateness	.014	.217	.180	.011	.012	.235	.311	.453	—

The lack of close correlation between the use of study-hall time and the six traits is explained by the fact that there is in most schools no definite standard of study-hall conduct that is not covered by such terms as "not being disorderly," and "doing something." A closer correlation may be expected "when pupils know definitely what they are to do during the study-hour, when such conventions of the recitation as attention, right attitude, demands for improvement in work, are carried over into the study-hall."

Miss Busch recommends in conclusion a reorganization of study-halls whereby pupils who use their time wisely may not be interrupted by those who have not yet learned to do so. The pupils are to be grouped and placed in separate rooms. One group is to consist of those who can study independently. A second group is to be made up of those who have not yet learned to apply themselves methodically to work. They will receive guidance in planning the use of the study-hour and help in carrying out their plans. Those who lack initiative or the ability to plan a study-program and carry it out will form the third group.

The chief function of the teacher in charge of these various groups is to see (1) that the pupils have study programs, (2) that they apply themselves diligently to the work outlined for the hour, and (3) that they accomplish something definite during the hour. Promotion from one group to the next is made as

soon as the habits of systematic and independent study are acquired.

Miss Busch presents the following program-card, which is almost a duplicate of one used by Mr. Reeves, from whom she quotes as follows*:

"During the two and one-half years that study has been closely supervised and regular programs for each pupil strictly followed, three things have been accomplished with more or less success: (1) the problem of discipline has been practically solved; (2) considerable improvement has been made in scholarship; (3) regular hours of home-study have been provided for by the large majority of the students."

Pupil's Study Program (front of card)

Name .....Grade.....Class.....Room.....

Hour	Study	Recite .....
9:15.....	.....	.....
10:00.....	.....	.....
10:45.....	.....	.....
11:30.....	.....	.....
12:15.....	.....	.....
1:00.....	.....	.....
1:45.....	.....	.....

Directions for Study (back of card)

1. Follow your program regularly.
2. If possible study your lesson immediately after the assignment is made.
3. Take brief notes and afterwards re-study by outline.
4. Use dictionary and reference books for points not clearly comprehended.
5. Concentrate your mind so that outside interests will not frequently disturb your study.
6. Do not try to commit exact words until you understand their content.
7. Connect the important facts of the new lesson with facts previously learned.
8. Make comparisons and contrasts when possible.
9. Carefully review and think over the previous lesson before beginning the next.
10. The extra effort spent on preparation pays the greatest intellectual dividends.

* Parker; Methods of Teaching in High Schools, p. 404.

III. VOCATIONAL INSTRUCTION

A. Instruction in Stenography and Typewriting in High Schools—an Investigation of Modern Business Practice and Methods of Teaching

The Commercial Education Club, an association of school men and business men of this City, organized to "investigate modern business practice and methods of teaching," has issued, under date of March, 1915, a report relative to "stenography and typewriting in the New York City High Schools." The question submitted to the Committee which conducted the inquiry was, "SHOULD STENOGRAPHY AND TYPEWRITING BE COMPULSORY FOR ALL PUPILS IN THE COMMERCIAL HIGH SCHOOLS AND IN THE COMMERCIAL DEPARTMENTS OF THE GENERAL HIGH SCHOOLS OF NEW YORK CITY?" In addition, the Committee was instructed to inquire into a number of kindred matters, such as, "Are business men satisfied with the high school graduates whom they employ as stenographers?"; "In what subjects do business men expect high school graduates to be proficient?"; "Has the stenotype, the dictaphone, or the business phonograph displaced stenography; if s,o to what extent?"

Questionnaires were sent to six hundred representative business men. Only a little more than one-sixth of the inquiries were answered. Therefore, the number of replies rceived was not sufficiently large to establish any general truths concerning the business community as a whole. More than one-third of the firms that answered evidently have not been in the habit of employing high school graduates as stenographers. The facts learned from the responses to the questionnaire are:

1. The stenotype is, up to the present time at least, practically negligible as a substitute for stenography.
2. The dictaphone and the business phonograph have partially displaced stenography in a small percentage of business houses. (No positive prediction regarding the future of these machines can be made, and it is suggested that the possible increase in their use is one of the subjects with which the club should keep in close touch.)

3. A greater proficiency in English and in arithmetic on the part of high school graduates employed as stenographers and clerks is the chief desideratum of the business community.
4. About one-third of the firms that replied expressed a wish that high school graduates should be familiar with some of the mechanical devices used in business offices.

From their experience with this investigation, the committee believes that the best means of ascertaining the sentiment of the business community is to consult the employment departments of the several high schools, rather then to send broadcast letters of inquiry to business houses. "The high school employment bureau is the natural point of contact between the school and the business community. It ought to be made the barometer which indicates for the school the conditions prevailing in the business world." In the judgment of the Committee, the Club will do a great service to the schools and to the business men of the City by encouraging the high school employment bureaus to keep accurate records of their transactions, and by encouraging business men to patronize these bureaus and to express their wishes frankly and freely to them.

Considering the statistics given by the high school principals, the Committee finds that about 80% of the boys and 87.2% of the girls who graduate from the commercial courses get their first opportunities in business positions requiring stenography or typewriting or both.

The Committee is of the opinion that since about 80% of the boys and 87% of the girls who graduate from the commercial courses get their first opportunities in business as stenographers and typewriters, the great majority of pupils should continue to take these subjects. Since, however, 20% of the boys and 13% of the girls who graduate from the commercial course do not use stenography in their first positions, stenography should not be compulsory for every pupil in high school. As a corollary of this conclusion, the Committee believes that a full course of three or four years in bookkeeping should not be compulsory for every pupil, since a far smaller percentage of graduates become bookkeepers than become stenographers; that every pupil in a commercial high school should receive at least a year's instruction in bookkeeping, so that he may understand the fundamental opera-

tions and the general terms of business; but it should not be made compulsory for pupils to take a three-year or four-year course intended to impart skill and technique in keeping sets of books, which perhaps a majority will never be required to keep.

The Committee believes that the decision as to whether a pupil shall or shall not take stenography and typewriting should rest with the principal or with the administrative head of the commercial course, rather than with the pupil. Pupils should be excused or excluded from stenography classes, whose hearing is seriously defective; who are found to be temperamentally incapable of taking stenographic dictation; who are seriously deficient in English. The Committee believes that the adoption of a plan to begin stenography in the first year of high school would be a step in the wrong direction. "It would increase the supply of immature stenographers, deficient in English, with whom the market is already glutted."

If something must be done for these pupils who cannot stay for the full high school course, the best plan to follow, in the opinion of the Committee, would be to establish a one-year or two-year vocational course for these pupils, but these short vocational courses should find a place in an intermediate school specially provided for the purpose; or they should be established as supplementary courses in the elementary school. The Committee is of the opinion that the commercial high school has a more important function than to become a competitor of the short-term private school and to unload on an already overstocked market thousands of immature stenographers. There is room near the top in business for pupils who have a good commercial high school education, and it is one of the functions of the commercial high school to fit the pupils for these positions. The Committee believes that the best ideals of the commercial high school will be realized by so arranging the course of study that the technical training for business and the general training for citizenship will be completed simultaneously when the pupil graduates. For this reason, and because the stenographer needs the maturity, the judgment, the general information, and the initiative which a good high school education gives, the Committee believes that

the best place to teach stenography is in the last two years of the commercial high school course.

The Committee has embodied its most important recommendations in the following set of resolutions:

RESOLVED, That there should be established in every commercial high school, and in every commerical department of the general high schools, an office training laboratory equipped with the mechanical devices commonly used in business offices, and that it should be made part of the student's course in the last year to do a definite amount of work in this laboratory under the supervision of the department of stenography and typewriting.

RESOLVED, That the proper place to teach stenography is in the last two years of the commercial high school course; and that during these two years, five periods per week should be allotted to this suject.

RESOLVED, That stenography and typewriting should not be made elective subjects in the commercial high school course as now constituted; but that it should be in the discretion of the high school principal to excuse or exclude from stenography pupils who are evidently unfit for stenographic work, either because of physical or temperamental disability, or because of gross deficiency in English, and that pupils so excused or excluded should be assigned by the principal to some other subject or subjects for which they are better fitted, and which, in the judgment of the principal, will be of service to them in business life; and that the subject or subjects to which they are thus assigned should be accepted in lieu of stenography for graduation.

(These resolutions represent the judgment of the majority of Committee members. A minority report was also presented by one member.

B. A Suggested Terminology for Vocational and Industrial Instruction

The constant confusion resulting from terms looesly employed—vocational instruction, industrial, prevocational, continuation, co-operative, etc.—has created a real need for a clear understanding of the significance of such terms.

In the report of the Board of Education of Massachusetts, January, 1915, in a chapter concerning continuation schools, the proposed classification of these schools is given as follows:

1. General improvement continuation schools

These are intended to extend the general education of the pupil. They are not vocational schools. Citizenship and hygiene should constitute a part of the work in the program of this type ofschool.

2. PREVOCATIONAL CONTINUATION SCHOOLS

In these, a pupil may secure information about a number of trades, and through vocational guidance be assisted in making a choice of a calling. Membership in the prevocational school includes pupils with no well-defined vocational aim, who may or may not be employed in a skilled industry.

3. VOCATIONAL CONTINUATION SCHOOLS

These are schools in which vocational instruction is given: commercial, industrial, agricultural, or homemaking instruction. Such schools are classified as either (a) trade preparatory or (b) trade extension.

(a) *Trade Preparatory Continuation Schools*:

These are schools which offer training unrelated to the occupation followed by the pupil during the working day. The aim of this school should be either to teach a skilled trade to a pupil not already engaged in one; or to enable a pupil to change from his present occupation to one more suited to his tastes and capacities.

(b) *Trade Extension Continuation Schools*:

These are schools which offer the pupil already employed in some occupation, vocational education in subjects closely correlated with the work in which he is engaged. The aim of the school is to assist the pupil to advance in his chosen calling.

4. PART-TIME SCHOOLS

The part-time school, while in many ways resembling the continuation school, shows in its established practice sufficient difference to warrant the use of distinguishing terms. The use of the term "part-time school" is restricted to trade extension schools, and the period of release from employment for the purpose of attendance at such schools is not stipulated by statute, as is the case of continuation schools. At least four hours of schooling per week are required in the continuation schools, while in part-time schools attendance during alternate weeks, or in dull seasons, as well as apprentice requirements, are characteristic features.

The report also includes courses of study for these schools.

C. Courses for Apprentices and Compulsory Attendants in Wisconsin

Bulletin No. 10, 1914, of the Wisconsin State Board of Industrial Education, contains the following-named outlines of lessons for continuation classes, which will be of interest to those considering the problem of training workers who leave school at an early age to become better citizens and more capable workmen:

English:	for apprentices for permit boys for permit girls for foreigners
Citizenship:	for apprentices for permit boys for permit girls for "persons applying for admission"
Hygiene:	for apprentices for permit boys for permit girls
Safety:	for apprentices for permit boys for permit girls
Library reading:	for permit pupils
Dressmaking:	for evening classes
Sewing:	for permit girls
Cooking:	for evening classes for permit girls
Practical art:	for permit pupils
Printing and advertising:	
Retail selling:	
Business practice:	for permit girls
Bookkeeping:	for evening classes
Shorthand:	for evening classes
Typewriting:	for evening classes
Mechanical drawing:	for evening classes for boys
Shop drawing:	for boys
Shop construction:	for all-day classes
Shop projects:	for permit pupils
Shop mathematics:	for apprentices
Applied mathematics:	for permit boys
Gasoline engine practice:	

The Wisconsin State program of instruction for wage earners has been aided in Milwaukee by the distribution of booklets which are given to all pupils applying for permits to work. The booklets call attention to the necessity for serious consideration of the problem of the selection of an occupation for which they are to prepare themselves. These pamphlets explain that the continuation schools offer instruction in the following occupations in which men make a man's wage:

Baking
Cabinetmaking
Carpentry
Concrete work
Electrical work
Machinist trade
Masonry
Painting
Pattern-making
Printing
Power plant operating
Sheet metal work
Steam fitting
Tinsmithing
Drafting
Bookkeeping
Stenography
Store clerking
Plumbing

D. Vocational Courses in the Chicago Schools

The Chicago Public Schools are about to establish classes for printers' apprentices. The printing unions and employing printers are co-operating with the department of education. The boys will study half a day a week for five years, and they will be paid while in school.

The subjects to be studied in school are:

1. *English:*

   This subject will include (a) Grammar, which will be a review of the parts of speech; correction of faulty English; simple paragraphing and composition; business letters; punctuation.

   (b) Spelling; rules for spelling; rules for word-division, for compound words, capitals, etc., with much practice in spelling; spelling of trade names and words; abbreviations; use of dictionary and study of marking.

   (c) Proof reading; oral reading for copy holding.

   (d) Preparing copy; how to cut folio and head; how to indicate type; rules for spelling and indention; how to determine size of illustrations.

   (e) Reading and study of some work of literature suited to the age of the apprentice.

2. *Arithmetic:*

   (a) Review of elementary arithmetic, common and decimal fractions; percentage; mensuration.

   (b) Paper table; type measurement and the point system; computing type on page; weight of type; estimating paper; estimating composition; estimating manuscript.

   (c) Simple bookkeeping.

3. *Drawing and Design:*

   Simple freehand and mechanical drawing, leading toward study of type faces, balance, and shade harmony; design. Study of color.

4. *History and Civics:*
   Brief review of United States history and study of government; history of printing, studies through biographies of great printers; industrial history; study of hygiene; physiology; occupational diseases; necessity for good air and good light.

5. *Advanced Technical Studies:*
   Inks and their composition; paper and its manufacture, sizes, weights, qualities; electrotype, stereotype, zinc plate, halftone, woodcut; type metal and type making; study of type bodies and faces; advanced color study; criticism of printed matter.

6. *Course in Imposition:*

Beginning February 1, 1915, the Chicago public high schools offer a four-year preparatory course in pharmacy. This course is in accordance with the recommendations of the Chicago Retail Druggists' Association, and is intended primarily to assist those boys who are employed in drug stores as apprentices in pharmacy, to acquire a sufficient number of credits to gain admittance to the schools of pharmacy.

If a student can attend high school for three and one-half to four hours each school day, he will be able to make three regular credits during each school year. In addition, he may be awarded one credit each year for work in the store, provided the proprietor affords him a reasonable opportunity to learn and to practice the things belonging to the duties of a pharmacist. If this additional credit is earned, the apprentice may be able in four years to obtain fifteen credits required for admission to the colleges of pharmacy, and may be able to secure the diploma for graduation from the high school, for which seventeen credits are required.

E. Short-Unit Courses

The short-unit course is being extended. Among the first school systems to introduce this course was that of New York City. In 1913, in conjunction with the principals and teachers of the evening trade schools, the evening schools department of the City published a short-unit course for the different trades.

A recent bulletin of the United States Bureau of Labor Statistics contains a list of short-unit courses in various trades

and occupations, and a discussion of their application to trade extension work in part-time and evening schools. These courses are designed for workers already in the trades who need certain specialized instruction, a knowledge of some specific process. The bulletin states that seven millions of people are wage earners in this country and that the large majority of them are engaged in productive industry. "The problem of reaching these workers and training them for increased industrial efficiency is the great task of the industrial school. While some of these workers can be reached by the all-day schools, most of them must be trained for their work, if at all, after they have left the school to become bread winners." It is with the training of this latter group that this bulletin is especially concerned.

Each brief course deals with one part of a trade and is complete in itself. "The Unit System is flexible; it meets the needs both of the person who wishes help on some particular point, but who can not take an extended course, and the person who wishes a complete course. The pupil can break into the work at the point of his need, get the help he wants and then withdraw; if he has other needs, to satisfy them he has only to repeat the process. By taking units enough he can get a well-rounded training."

The courses in the list are intended to be suggestive only. They are given to show the way in which analyses of various trades can be worked out, and not for the purpose of providing a school with ready-made courses. The courses included relate to the machinist's trade, to practical electricity, carpentry, plumbing, sheet-metal work, wood millwork, printing, concrete construction, estimating for general building construction, boot and shoe manufacture, janitor work, waitress work, laundry, chemistry, etc. A reference is made to the application of the short unit courses to homemaking.

The bulletin also contains an account of the school experiment in the factory of D. E. Sicher & Co., of this City, manufacturers of "white goods"; and a descriptive analysis of processes and occupations in this industry.

(Short-unit courses for wage earners and a factory school experiment—Bulletin of the U. S. Bureau of Labor Statistics, Whole No. 159, Misc. Series No. 6.)

The evening work in the Holyoke Vocational School is organized on the short-unit plan. The effect on attendance alone (as indicated below), not to mention numerous educational advantages, has justified the adoption of this plan:

1. Average percentage of attendance in two best classes run on short unit plan—96.3
   Average percentage of attendance in two best classes run on long unit plan—84.5
   Increase secured by operating the short unit plan—11.8
2. Average percentage of attendance in two poorest classes run on short unit plan—72.8
   Average percentage of attendance in two poorest classes run on long unit plan—67.6
   Increase secured by operating the short unit plan—5.2
3. Average percentage of attendance for three months in eleven classes run on short unit plan—78.5
   Average percentage of attendance for three months in three classes run on long unit plan—59.3
   Increase secured by operating the short unit plan—19.2

Somewhat different is the application of the unit course idea to the teaching of household arts, in Montclair, N. J.

10 lessons; Bread, rolls and biscuit
10 lessons; Desserts
10 lessons; Salads and salad dressing.
10 lessons; Canning and preserving
10 lessons; Fancy cooking
10 lessons; Invalid cooking
6 lessons; Marketing

A small fee is charged to cover the cost of material. Four o'clock in the afternoon is the time selected for the sessions.

F. Notes on Vocational and Industrial Instruction

Outline of study for prevocational classes

The Empire State Vocational Conference Bulletin, Vol. 1, No. 1, contains outlines for "vocational English, mathematics, geography, history and civics," for the seventh and eighth years, which will undoubtedly prove interesting to teachers of prevocational classes in our elementary schools. (The outlines are on file in the office of this Division.)

THE HOLYOKE VOCATIONAL SCHOOL FOR BOYS

In this school, a pupil may elect to go out on part-time employment after a two-year period of training under instruction. This makes it necessary for the school to face the problem of co-operation with the manufacturer and with organized labor. Then, too, a candidate for a diploma in the school must spend the last half of his fourth year in full-time employment in the trade for which he has trained. A close relation must be maintained, therefore, between the employer and the board officials. To secure the desired co-operation, the State Board of Education has set up an agency, the Advisory Committee. Each trade or occupation taught in the school is represented on this Committee by a group of three members, each of whom is locally interested in the trade or occupation. The duties of the Advisory Committee are voluntary; the members are chosen because of their interest in the problem and because of their experience and knowledge of the conditions existing in the trade which they represent.

CONCERNING REPORTS ON CERTAIN SCHOOLS OF GERMANY

The report of Dr. James P. Haney, Director of Art in the New York City High Schools, on the organization and teaching of drawing and handwork in German schools, is extremely valuable not only for the information it gives, but for its suggestion to American teachers as to aims and methods that should be sought and avoided. The report is illustrated with drawings that are no less valuable than the text.

Dr. Fritz's report on Vocational and Continuation Schools of Munich, is published in the November-December, 1914, Bulletin of the High School Teachers' Association of this City. Dr. Fritz, a first assistant in fine arts at Stuyvesant High School, was one of the twenty-five American teachers who for three months of last year studied and observed in the continuation and trade schools of Germany.

IV. VOCATIONAL GUIDANCE

A. A Suggested Query for Pupils as a Guide to Vocational Counsellors

In Somerville, Mass., a study has been made of the attitude of high school pupils towards the opportunities provided in the schools. The questionnaire that was given to the pupils is offered here for the possible use of vocational counsellors:

Name Age Yrs. Mos. Class Room

1. Do you expect to complete a course of four years in the high school?
2. If not, how many years do you expect to stay?
3. If you do not expect to remain four years, what is the reason:
   (a) Financial conditions?
   (b) Lack of success in school work?
   (c) Desire to go to work?
   (d) Loss of interest?
4. Please underline the course which you are now taking:
   (a) General; (b) College Preparatory; (c) Manual Arts; (d) Commercial; (e) Two Year Commercial.
5. What led you to chose this course:
   (a) Advice of parents, teachers, friends?
   (b) Success of others?
   (c) Belief in your personal qualifications and ability for the work of this course?
6. Do you know what studies are included in this course:
   (a) In the first year?
   (b) In the second year?
   (c) In the third year?
   (d) In the fourth year?
7. What qualifications do you think you have for the work of this course?
8. What line of work do you intend to follow after you leave high school?
9. What do you understand to be the requirements of this work?
10. How have you ascertained these requirements?
11. Is this the work which you really desire to do?

12. What have your parents advised?
13. To what extent, if any, have possible financial benefits influenced your choice?
14. If this is not the work which you really desire to do, why are you not preparing to follow your personal choice?
15. What service to the community are you planning to render through your vocation?

EXTRA:

A. For College Preparatory Pupils:
   1. For what college are you preparing?
   2. Why have you chosen this college?
   3. What are its requirements?

B. For Scientific, Normal School, Normal Art School, etc., Preparatory Pupils:
   1. For what college are you preparing?
   2. Why have you chosen this college?
   3. What are its requirements?

It was found, as might be expected, that there was less certainty in the minds of first- and second-year pupils regarding the length of stay in the school. Financial conditions and desire to go to work were evidently the chief reasons for leaving school before the completion of the course.

In the reasons for choice of course, there is an indication that guidance is needed: "the course was chosen at random"; "selected the commercial course mostly because there was nothing I really wanted, and I had to take something"; "took general course because I did not intend to go to college or take business course"; "didn't know what else to take." In view of these answers, it is not surprising to learn that of 1,157 answers to the query "Do you know what studies are included in this course?" only 426 indicate knowledge of the work of the four years, 145 of three years, 272 of two years and 275 of the first year. The pupils' ideas of their qualifications for the course taken range from "none" or "I don't know," to statements of special abilities or interests, etc.

The occupations to be followed later cover much ground, and knowledge of the requirements of these occupations is limited; information had been gained from many sources: people, reading, inquiry, observation, etc.

In the majority of cases, pupils were doing the work they really wished to do. In cases in which the pupils were not doing the work they desired to do, it was found that the chief obstacles were financial conditions and family objections. Financial benefits had much to do with choices.

Service to the community was to many a new idea. However, many replies showed much thought and understanding of what service might mean.

The answers indicated that pupils' information concerning higher institutions was general and limited.

B. An Attempt to Obtain the Opinions of Professional and Business Men Concerning Courses of Study

"School and Society," June 19, 1915, includes a contribution of interest to those who are studying the problem of vocational guidance. Dr. Harris Hancock, of the University of Cincinnati, desiring to get the views of men not directly connected with teaching, concerning the courses in a high school which they would advise a boy to take, addressed an inquiry to leading clergymen, lawyers, physicians and business men in the United States, and to prominent citizens of Cincinnati. The questions were asked:

"Which of the following courses in a high school would you advise a boy to take?"

No. 1

"A course where both mathematics and the classics are optional; for example, where history is substituted for mathematics.

No. 2

"A course where mathematics is required, the classics being optional.

No. 3

"A course where the classics are required, mathematics being optional.

No. 4

"A course requiring both the classics and mathematics."

"Do you believe (A) in a general knowledge of a great number of subjects? or (B) in a thorough knowledge of a few subjects?"

A summary of answers, indicating the courses selected, is submitted herewith:

FROM NON-RESIDENTS OF CINCINNATI

	No. 1	No. 2	No. 3	No. 4	No. 2 or 4	No. 1, 2, 3 or 4	No. 1 or 4
20 clergymen	1	1	0	17	1	0	0
47 business men	2	18	1	20	5	1	0
15 physicians	1	1	1	10	1	1	0
9 lawyers	0	2	0	5	2	0	0
8 miscellaneous	1	3	0	4	0	0	0
99 total	5	25	2	56	9	2	0
					No. 3 or 4		
3 heads of college faculties	0	0	0	2	1		

FROM CINCINNATIANS

	No. 1	No. 2	No. 3	No. 4	No. 2 or 4	No. 1 2 or 3	No. 1 or 4
15 clergymen	1	2	0	9	2	1	0
41 business men	2	17	0	19	2	0	1
17 physians	2	7	0	6	2	0	0
26 lawyers	1	4	0	18	3	0	0
6 miscellaneous	1	4	0	1	0	0	0
105 total	7	34	0	53	9	1	1

To the questions (A) and (B) the answers were:

FROM NON-RESIDENTS OF CINCINNATI

	Question (A)		Question (B)	
	Yes	No	Yes	No
Business men	16	20	32	4
Clergymen	11	5	12	4
College faculties	0	3	3	0
Lawyers	5	3	6	2
Physicians	7	5	8	5
Miscellaneous	3	2	4	1
Total	42	38	65	16

FROM CINCINNATIANS

	Question (A)		Question (B)	
	Yes	No	Yes	No
Business men	17	11	16	7
Clergymen	9	5	12	1
Lawyers	9	11	18	3
Physicians	6	9	12	2
Miscellaneous	2	3	3	1
Total	43	39	61	14

N.B. These answers were not exclusive; for example, many marked Yes to both (A) and (B).

From the Cincinnatians some letters were received giving as answers:

"So much depends upon the boy"; "Depends upon the after career"; "Depends upon the future requirements of the student"; "Only teachers coming into daily touch for a long period, with pupils of varied abilities, are fully competent to judge of the working of courses of instruction," etc.

These letters caused Dr. Hancock to communicate with the seventh- and eighth-grade teachers of the Cincinnati schools, asking two questions:

Question (A) "Out of every one hundred boys that you have taught, how many do you believe have consulted you regarding their future careers and have profited by your advice?"

Question (B) "Before entering high school, out of every one hundred boys, how many do you think have definitely decided upon their future careers?"

The replies to the first question indicate that the general average is between 3 and 7; to the second question, the general average is between 4 and 7.

A number of interesting letters are included in the report.

C. A Study of the Employment of Boys of High School Age in Iowa

"Work, Wages and Schooling of Eight Hundred Iowa Boys in Relation to Problems of Vocational Guidance" is the subject of

an investigation made, in the summer of 1914, by the Extension Division of the State University of Iowa in co-operation with the College of Education of the University. The study represents an effort to ascertain the facts concerning the employment of boys of high school age in two of the larger cities of the State. About nine hundred boys in Des Moines and one hundred boys in Sioux City were interviewed by the investigators. The ages of the boys varied from twelve to twenty-four. Sixty per cent. of the boys were from sixteen to nineteen years of age. The chief facts brought out by this study are summarized as follows:

1. "More than forty per cent. of the boys leave schools located in cities other than the one in which they are now living. This means that if these boys receive vocational education for the various pursuits which they enter it would be necessary for them to receive it before coming to Des Moines and Sioux City. A compulsory system of continuation school attendance might succeed in reaching most of these boys.

2. "Workers in juvenile occupations are recruited largely from the sixth, seventh and eighth grades of the public schools and at about the time when the children are fourteen, fifteen and sixteen years of age.

3. "Boys leave school for a great variety of reasons. The three most commonly offered are 'necessity,' 'dissatisfaction with school,' and 'preference for work.' However, lack of parental control and interest is probably the chief cause.

4. "About seventy-five per cent. of the boys go to work immediately and only a very small percentage are idle more than a month after leaving school. This would indicate that there are plenty of opportunities for boys who want to work.

5. "Over eighty-five per cent. of the jobs which these boys entered were secured by the boys themselves with little or no assistance. For the most part, teachers do not attempt to assist them in securing employment. The boys as they leave school are thrown on their own resources. Vocational guidance would probably be of great value to most of these boys.

6. "On the average a boy passes through three jobs in two years. It is evident from this that the work that the boys are in is satisfactory and does not succeed in holding them.

7. "The boys give a variety of reasons for quitting jobs. Their chief reason seems to be a desire for better wages. They think more of an increase in salary than they do of an advancement in skill.

8. "The beginning wages of boys is about $5.50 a week. This includes boys of different ages. The range is from nothing to $20.00 a week. Fifty per cent. of the boys receive a beginning weekly wage of from $4.50 to $7.00. This would seem fair wages for inexperienced boys of these ages.

9. "Boys of the same age receive about the same beginning wage regardless of the number of years of schooling which they have had. Age is probably a much more important factor than grade of schooling in determining the beginning wage.

10. "Boys eighteen years of age receive nearly twice the weekly wages of boys fourteen years old when they leave school. Between boys thirteen, fourteen and fifteen years of age, is little difference, but after the fifteenth year, there is a very remarkable increase, $1.00 per week from fifteen to sixteen, nearly $1.50 from sixteen to seventeen, and over $1.00 from seventeen to eighteen.

11. "Experience is the chief factor in determining the wages of boys. Boys with four years of experience double their wages and they do not reach a level until about the eighth or ninth year of experience, at which time they are receiving over $14.00 a week and are over twenty-one years of age.

12. "Boys are engaged in over 111 different occupations. However, thirty-three of these occupations include about seventy per cent. of the workers. The most popular occupations are typical blind alleys; for example, helpers and general workers, drivers, errand messenger boys, wrappers and packers, etc.

13. "A rough estimate indicates that from seventy-five per cent. to eighty per cent. of the boys are engaged in unskilled or semi-drilled pursuits.

14. "The most common method followed by boys in learning a vocation is a 'trial and success' method. They try this and that pursuit to see whether they are suited to it or it is suited to them. While no elaborate system of vocational schools would entirely eliminate this method of learning vocations, it might succeed in reducing and eliminating some of the waste resulting from the present system.

15. "Of the 846 boys studied, 628 (75 per cent.) had at the time of the investigation a definite ambition. That is, they desired to prepare for and enter a particular occupation.

16. "Of the group having an ambition, thirty-five per cent. were ambitious along lines of work in which they already had had most of their vocational experience.

17. "In the case of about twenty-three per cent. of the ambitious boys there was but a very slight correlation between their previous work and their ambitions.

18. "In the case of forty-two per cent. of those having an ambition, there was absolutely no correlation between their previous work and their ambition.

19. "Proportionally, more boys who are working along lines in which they desire to continue are financially successful than those whose ambitions lie outside of the fields of their previous work.

20. "A larger number of the boys with an ambition make some progress toward skill than do boys without an ambition. By progress towards skill is here meant advancing toward a skilled pursuit by changing occupations or by advancing in skill while remaining in an occupation, as in printing. From these figures it would seem that ambitious boys are more successful than unambitious boys measured either in terms of skill or in amount of weekly wages.

21. "Fewer than twenty per cent. of the boys who had had experience in agricultural pursuits desired to remain in the same. Apparently, the back-to-the-farm movement has not affected these boys to any great degree.

22. "Mining is not an occupation for which boys desire to prepare. Only two of the thirty-eight boys who had had experience along this line desired to continue in it.

23. "Manufacturing and mechanical industries and pursuits attract more than fifty per cent. of the boys. This is true in spite of the fact that less than forty per cent. had had experience along these lines. The boys want to be machinists, printers, carpenters, electricians, mechanics, plumbers and engineers. They are also greatly interested in commercial pursuits. In all, 119 boys desired to follow such lines. A very few are interested in professional service, domestic and personal service and clerical occupations."

D. A Vocational Record Card

In the Cincinnati schools, a vocational record card is used. The plan is to begin the use of the card in the eighth grade and continue it throughout the four years of high school. It is hoped that the use of this card will cause teachers to be more observant of the characteristics of their pupils, both in and out of the class room, and that they will thus become better able to offer suggestions and advice.

VOCATIONAL RECORD CARD

Name .....School.....
Date of Birth.....Nationality.....
Parent's Name.....Residence.....
1. Health and Physical Characters: Height.....
(From the Physician)
Weight.....Sense Organs: Eyes.....Ears.....
2. Powers of Observation: Good.....Medium.....Poor.....
3. Memory: Good .....Medium .....Poor .....
4. Attention: Good.....Medium.....Poor.....
5. Association: Rapid Mental Co-ordination.....
Medium rate of Co-ordination....Slow Mental Co-ordination....
6. Type of Activity: Deliberate.....Impulsive.....Neither.....
7. Intellectual Ability: Good.....Medium.....Poor.....
8. Manual Ability.....
(Domestic Science or Manual Training)
Good .....Medium .....Poor.....
9. Social Leadership: Well Developed.....Moderate.....
10. Perseverance: Good.....Medium.....Poor.....
11. Habits of Promptness: Good.....Medium.....Poor.....
12. Studies: Preferences.....
Successes .....
Dislikes .....
Failures .....
13. Vocation of Parents.....
14. Which High School?.....
15. What Vocation has the Child in Mind?.....

C. A Neighborhood Association Experiment in Vocational Guidance for Pupils After Leaving School

An interesting report of vocational guidance is made by Miss Rosalie Manning, Chairman of the Child Welfare Committee of the Yorkville Neighborhood Association.

The vocational branch was organized in the spring of 1914, and devoted its energies to supervising and aiding boys and girls who had obtained working papers, with the following aims in mind:

1. To see that the law requiring a boy between fourteen and sixteen to be in school if not working, was enforced.

2. To see that the boys and girls were not employed in unsuitable places.

3. To persuade parents not to allow their children to leave places of employment without reason but to consult the committee first.

4. To interest employers in the individual child and to make them see that to offer the employee a chance for advancement in return for good service is to their advantage.

5. To open a free Juvenile Employment Bureau as soon as the committee became familiar with enough worth-while employers to insure its success.

Miss Manning reports that the principal work of the association has been to keep children off the street, especially after they have lost their first job, thus preventing them from coming under the control of older boys, sometimes of a very vicious type. When a boy had no job, either he was placed immediately or returned to school. In some cases the generosity of individuals furnished the carfare by which the boys and girls could attend the trade schools.

Miss Manning believes that it is too early to draw any positive conclusions on the value of the work, although she believes that its success up to this time indicates possibilities of considerable expansion, provided sufficient aid can be obtained to carry on the work. She believes that the introduction of more vocational work into the schools would be desirable, but that "this training alone

will never prevent the wrecks of industry with which we are surrounded. The trouble is due to being out of work and on the street. Undirected and unguided, these children of fourteen go to work. The restraints of school are removed; the parents are powerless. These parents have no possible means of controlling the situation even if they have the knowledge. Boys and girls take positions and give them up at will, at an age when they need guidance more than at any other time in their lives. It is this point which the committee wishes to bring to the attention of the authorities—that these children need supervision after they leave school."

One encouraging feature has been the attitude of employers who have met the representatives of the committee more than half way.

Miss Manning believes that merely getting a child a job is by no means a satisfactory solution of vocational placement, but she is strongly of the opinion that either he should be in school or should be working; that a poorly paid or even a blind-alley job is better than loafing. One of the things which she yet expects to accomplish will be a proper method of investigation by which children may be placed in better positions.

V. SURVEYS AND TESTS

A. A Summary of the Year's Surveys

School surveys continue to grow in number and to increase in variety. This Division has therefore attempted to compile a list of surveys conducted or begun during the school year 1914–1915. For those interested in surveys of the period preceding, a list will be found in the thirteenth year book of the National Society for the Study of Education (July, 1914).

1. School surveys by members and faculties of colleges and universities

Two public school systems have been surveyed during the year under the direction of Dr. Bobbitt of the University of Chicago; South Bend, Ind., and San Antonio, Texas. Prof. E. D. Jennings of the University of Texas has recently begun a study of the public schools of Dallas. Dr. George Strayer of Teachers College of this city directed the survey of the public school system of Butte, Montana. An educational survey of the Ashland, Oregon school system has been begun; and Professor W. G. Roylance of the University of Utah will direct a study of the Jordan School District, Midvale, Utah. Salt Lake City has undertaken a general survey of its school system under the leadership of Professor Cubberley of Leland Stanford Junior University. The University of Colorado has made a survey of public high school education in the state. The University of Iowa's extension division will help the public schools of Iowa. Specific problems presented by local authorities will be studied and recommendations will be made after complete investigation. The University of Missouri has conducted a survey of the grammar course in the Kansas City Public Schools. (Reference to the results obtained is made elsewhere in this report.)

2. School surveys made by foundations, bureau of municipal research, etc.

The Russell Sage Foundation has made a survey of the public schools of Springfield, Ill.; and a survey of the public schools of Cleveland, Ohio, was begun on April 15, 1915, by Dr. Leonard P. Ayres and Mr. R. R. Lutz, of the Foundation. At the request of the Public Welfare Committee of Essex County, a survey of the schools of Newark, N. J., was made under the direction of the Bureau of Municipal Reasearch of this City. An educational survey of the State of Maryland has been launched under the auspices of the General Education Board. Dr. Frank P. Bachman is in immediate charge of the work. Under the direction of the State Board of Public Affairs, Wisconsin has completed a survey of the University of Wisconsin and of the normal school system of the State. Dr. W. H. Allen was the director of the University survey.

3. VOCATIONAL AND INDUSTRIAL SURVEYS BY MEMBERS OF FACULTIES OF COLLEGES AND UNIVERSITIES AND BY OFFICERS OF SCHOOL SYSTEMS

So that the industrial needs of the city may be met by the new Delgado School, a vocational survey of the grammar schools and of the industries of New Orleans was made by Dr. David Spence Hill, of the New Orleans Division of Educational Research. Under the direction of Dr. Herbert G. Lull, professor of education in the University of Washington, the State Commission on Vocational Education is making a survey of Washington for the purpose of assembling every essential fact bearing upon this phase of educational work. Such facts as are derived from the survey are intended for the guidance of the State legislature in the drafting of laws establishing vocational schools in Washington. To ascertain the exact needs of industrial education and to suggest plans for best meeting these needs, a survey is being made of Madison, Wis. Supt. A. W. Siemers, of the Industrial Schools is director of the work. "A Study of the People of Indiana and their Occupations for Purposes of Vocational Education," completed recently by Robert J. Leonard, Professor of Industrial Education, Indiana University, was made "to establish a fact basis for the consideration of vocational education and the development of vocational schools and courses in Indiana, and to serve as a reference and compendium of information concerning the people of the state and their occupations." "Some facts concerning the people, industries and schools of Hammond, and a suggested program for elementary industrial, prevocational and vocational education" is a study which shows how smaller cities may determine their vocational needs. The report contains an interesting analysis of pursuits and trades, which includes the exact nature of the work and a brief description of the skill required. Among the trades and pursuits listed are:

Metal trades and pursuits
Woodworking trades and pursuits
Printing, publishing and bookbinding trades
Pursuits involved in food preserving and distilling
Trades involved in piano making
Miscellaneous electrical pursuits
Work of steam, pipe and air-brake fitters
Work of millwrights and repairmen
Work of engineers, firemen, tenders, etc.
Occupations in the clothing industries
Painting, staining, enamelling and finishing

The report, prepared by Dr. Leonard of Indiana University, also presents detailed recommendations for courses of study. (Published by Board of Education, Hammond, Ind.) The Public Schools Department of Practical Arts of Reading, Pa., notes the progress of vocational education in the cities of the United States in a recent report, "A Survey of Manual, Domestic, and Vocational Training in the United States." Morris E. Siegel, a teacher in Public School 12, Richmond Borough, has been excused from regular class duty for the purpose of making a survey of the industries of this city, the work being under the direction of the superintendent in charge of co-operative and continuation classes.

4. VOCATIONAL INDUSTRIAL SURVEYS UNDER THE AUSPICES OF THE SOCIETIES INTERESTED IN EDUCATION AND THEIR OFFICERS

Minneapolis has begun an exhaustive analysis of both her trade and school conditions. The director of the survey is Charles A. Prosser,

formerly secretary of the National Society for the Promotion of Industrial Education, and now director of the William Hood Dunwoody Industrial Institute of Minneapolis. The work of the Richmond industrial survey, under the auspices of the National Society for the Promotion of Industrial Education, was completed last fall. The objects of the survey were: "To demonstrate the necessity of a knowledge of industrial and school conditions in the preparation of a program for the development of industrial education in a city; to show the kind of facts about industry and about schools which need to be gathered; to develop a method proved by experience for studying the industries and the schools for purposes of industrial education; to secure the co-operation of local and national, public and private agencies in the making of a type survey, and to bring to bear upon the task the best expert service and advice that could be secured." The Public Education Association of Philadelphia has published recently "A Survey of Opportunities for Vocational Education in and near Philadelphia." The report contains a classified list of schools offering vocational education, scheduled information regarding such schools, and an alphabetical index of vocational subjects taught. The information given is of the same character as that offered in the Handbook of Opportunities for Vocational Training in Boston, published in 1913, by the authority of the Women's Municipal League of that city.

5. OTHER VOCATIONAL AND INDUSTRIAL SCHOOLS

Seattle has recently completed a survey, the object of which was to secure information regarding the vocational problems of the city, their relation to the work of the public schools, and the means of establishing co-operation between the schools and industry. A survey of the leading industries of Cincinnati is being made by the Chamber of Commerce of the city for the purpose of obtaining information on which to base an extension of the industrial education of the city and for the purpose of guidance of youth going into industry. A report on the printing trade has recently been issued.

6. MISCELLANEOUS SURVEYS

A special committee of the school board of Holyoke, Mass., on April 16, 1915, submitted its report of a survey of the department of health and physical education in the schools. A report of a social survey of recent interest, "Colored School Children in New York," is published by the Public Education Association of this city.

Other surveys are described in greater detail in the following pages:

B. The Cincinnati Survey of the Printing Trades

A recent bulletin, "Printing Trades," issued by the Cincinnati Chamber of Commerce, is a report of a survey, the result of a suggestion coming from the Cincinnati public schools, that the Chamber of Commerce "conduct a vocational survey of the leading industries of the city for the purpose of obtaining information

on which to base an extension of the industrial education of the city and for the purpose of guidance of youth going into industry."

The scope of the vocational survey was determined to be:

1. An examination into several important industries of the city with a view of determining what the public schools may do toward the education of the workers in these industries.
2. An inquiry into what the public schools are now doing in industrial education.
3. An inquiry into the facilities now offered by agencies other than the public schools for industrial education.

It was decided to make an examination of the various industries by means of questionnaires, submitteed personally to employees and employers, to make a close personal study of the manipulative processes of these industries; to make a study of similar surveys, to base the investigation on the fundamental idea of making an inquiry into the educational content of the various occupations, for the purpose of determining what a workman in a given occupation needs to know, what the shop can advantageously teach him and what the school should do to help.

The printing trade was selected as the subject for the first inquiry for the reasons that (1) "of the four principal industries it has the smallest number of wage-earners; (2) it is generally considered that wage-earners in the printing trade are above the average workmen in intelligence; (3) the trade appears to be well organized upon the side of employers, and while less than half of the workmen are members of the unions, some of the occupations are quite thoroughly organized and several large establishments operate union shops; (4) the wages paid appear to be higher than those of the other principal industries."

The report states that, on the whole, the printing industry offers a good opportunity for the boy who wants to learn a trade and is adapted for this work. It is generally healthful, employment is regular and the income good. In greater detail statements are given concerning conditions affecting health, intelligence, moral influences, regularity of employment, hours of labor, wages, opportunity for promotion, etc.

Descriptions of occupations and processes are given.

It appears that, from the journeyman's standpoint, a common school education in the fundamental subjects—writing, grammar,

spelling, arithmetic, etc., is sufficient for entering into the printing industry. The reports of employers and employees alike indicate that nothing less than the completion of the eighth grade of the elementary school will suffice for success in the printing trades. It is believed that schooling beyond the eighth grade would be valuable, especially for compositors.

Employers state that the beginners lack in general intelligence and that they are deficient in reading, writing, grammar, punctuation, capitalization, etc. The employers believe that "the mere fact that a boy knows that he will have to go to work from the eighth grade, but believes that the instruction given him is for the purpose of guiding him to high school, is in itself sufficient reason to explain indifference to his studies and consequent lack of fundamental knowledge." Employers complain that the boys entering the shop nowadays fail to grasp the work idea properly and are not amenable to discipline; that they lack ambition and the "stick-to-it-iveness" necessary for success. The general complaint is that the boys leave school without a definite plan regarding their future work, that they lack stability, that they will not stay with one employer long enough to learn a trade, and that there are without a sense of responsibility to employers, to the trade, to themselves. They consider the immediate wage only, and do not have a proper appreciation of the difference between the skilled workman and one who can do unskilled work only. "There is no doubt that a system of vocational guidance which embodies economic and ethical instruction of such a nature as to inspire the boy with correct ideals concerning his relation to the job, would be welcomed by employers and would be of undoubted value to the boy himself." Some employers believe that through the introduction of vocational training and vocational guidance the schools will be better able to analyze the mental and manual characteristics of boys for the purpose of discovering the special occupation for which each may be fitted. For example, from this survey it has been determined that a considerable degree of intelligence, accuracy, patience, color sense, keenness of sight, dexterity and artistic feeling are necessary to a compositor for success. By some simple tests combined with the work of the school it might possibly be determined to what extent students

possess these characteristics. In this way, those fit for the occupation might be selected, or at least many of the unfit eliminated.

A detailed statement of the minimum general knowledge of workers in all the occupations in the allied printing trades is as follows:

1. Arithmetic:
   (a) Simple counting up to five hundred
   (b) Simple addition, in order to account for amount of work done
   (c) Simple multiplication
   (d) Practical part of a dollar, foot, inch
2. Writing:
   (a) Clear writing and making of figures
3. Hygiene:
   (a) Sufficient knowledge of the care of the body to enable workers to attain physical efficiency. This includes:
      1. Food, clothing, shelter
      2. Personal hygiene
      3. Sanitation
      4. Exercise, fatigue, recreation
      5. Health rules
      6. Heat, light, ventilation
4. English:
   (a) Simple written English
   (b) Reading of simple English
5. Elementary art:
   (a) Color sense sufficient to match tints in order to get even colored work
6. General intelligence:
   (a) That enables the workers to understand directions and to make necessary adjustments for change of work

In addition to this general knowledge, compositors and pressmen must have certain special training. Details concerning this training are given in the report.

In the training of persons for the various printing trades, there are two opposing ideas represented by two different kinds of schools. One plan contemplates teaching the trade itself in the public schools through one or two years up to a certain point and independent of the industry. The other plan contemplates the co-operation of shop and school in the training of the boy. A school of the latter type may be co-operative half time or it may be a continuation school to which learners go for a certain period, usually one or two half-days per week to be taught the academic and theoretical side of their trade.

Certain arguments, contained in the report presented by the national apprentice director of the United Typothatae of America, in favor of the co-operative continuation school, are in accord with a report of the Committee on Industrial Education of the American Federation of Labor. The report says:

"In the last analysis, industrial education will be measured by intensely practical men of the industrial world on the basis of skill and intelligence as developed by these undertakings, to fit the youth of the country for wage-earning occupations."

In order to meet the test successfully, apprentices must be trained under real conditions in a productive industry, thereby making the co-operative school plan a necessary feature of our public school system. Other reasons why co-operative schools should be a public charge are as follows:

1. Because of the very nature of things, past and present, the general public has confidence in the public school system.
2. The manufacturer ought not be expected to run his establishment to teach trades; nor can he be criticised for making "machine specialists" instead of all-round machinists, when one takes into consideration the fact that he is working to accomplish a very definite end; that is, to turn out a product.
3. The public school should teach the theory of the trade, while the actual practice and processes should be taught in the shop. This method permits of continuous development of capacity and relieves the manufacturer of the expense of the theoretical instruction, and provides a means of weeding out boys who are not adapted to particular trades.
4. By this method the boy, the employer and the community are benefitted.

Therefore, the school should train *for* the industries, but should not train *in* the industries.

The committee presents arguments only in favor of a system of industrial training in which the school supplements the training of the shop, because it has found "no worthy argument in favor of the other type of school."

Emphasis is placed on the importance of taking into consideration moral and civic training as well as technical training, in any system of industrial schools.

"Important as is the training of the beginner, the opportunity for further education in the theory and technique of his work should be given to the journeyman who is ambitious to advance. Such opportunity can be given only through night schools." Short-unit courses are recommended.

The inquiry indicates that both the schools and the unions recognize the value of printing as a manual training subject. The committee, therefore, recommends the introduction of printing, as a manual training subject, into the prevocational classes of the elementary schools and into the high schools, for the following reasons:

1. The educational value which is involved in the printing trade.
2. The valuable reaction which work at the printing trade possesses, creating additional interest in academic studies, particularly English.
3. The assistance which such work will give to the student in the selection of a vocation.

However, "the fact should never be lost sight of that this is manual training work and not the teaching of the printing trade, and that the boy who has learned to set type and share in the production of the school paper and of the miscellaneous printed matter used by the school and its allied activities, has not learned the printing trade. Unquestionably, the boy who has had this prevocational training, and through it has developed an interest in the trade while acquiring a rudimentary knowledge of its practice, makes a more promising apprentice than the boy who has not had this preparation. Such a boy may become a printer if he does not make the mistake of supposing that he is one already."

The report also contains courses of study in printing for several trade schools, and copies of agreements entered into by certain school systems and employers or labor unions.

C. A Business Survey of the Minneapolis School System

The Municipal Research Committee of the Minneapolis Civic and Commerce Association, at the request of the Board of Education of that city, has made a "business survey" of the public schools. The report of the committee includes a study of the construction, operation and maintenance of buildings, of the purchase, storage and distribution of supplies, and of accounting and auditing of the Board.

To handle the business affairs of the schools, the Board of Education appoints a superintendent, and, subordinate to him, a business executive and an auditor. The committee recommends

that the business executive, under the superintendent, should be placed in charge of all the business affairs of the Board of Education. He should be given definite authority to act and, within the lines of authority delegated to him, he should be held strictly responsible for the successful operation of his division of the school administration. A segregated budget should be prepared to show the objects and character of the proposed expenditures. "This budget should be the constructive program of the financial policy and plan of work which the board proposes for the fiscal year. With such a program, the board could hold executive employees responsible for accomplishing the work outlined."

It is recommended that there should be created the position of overseer of buildings, who, under the business executive, should be responsible for the maintenance and operation of the school plant. Supplies, equipment and material used in the schools should be standardized, and uniform specifications adopted for their purchase and distribution. As far as possible, all supplies should be delivered through a central supply house. A testing laboratory should be established where supplies may be given chemical tests. Provision should be made for obtaining cash discounts when bills are paid. The accounting should be organized so as to show accurately the financial condition of the board in assets and liabilities, and in the relation of the latter to budget allotments. The cost of operation and maintenance should be determined from expense vouchers and reports of goods consumed, instead of from invoices.

D. The Chicago School Survey

In her last annual report, Dr. Young, Superintendent of the Schools in Chicago, comments on recent school surveys. She then states in part: "I fully appreciated the good things that might result from a survey, and also realized that Chicago would not be left out in the sweep of the investigation. At Richmond (the meeting of the Department of Superintendence, February, 1914), the burden of discussion was laid on surveys. I concluded that great benefit would be derived in a system if the teachers could first make such a study. I then called together the super-

intendents to consider conducting a survey of our system by ourselves, before outside experts or lay investigators should take up the work. A few governing conditions were laid down; every school should have a representative on some one of the survey committees; hence, no school should have more than one representative; the chairman of the committees should be taken from the superintendent's staff, because each could have greater freedom in planning the trips and the meetings of the committee in charge than a principal or teacher could; no member of a committee should be a specialist teaching the subject assigned to that committee.

The following points were decided upon:

"First, each committee should hand in a written report on or before May 15th; second, the reports should indicate defects in the work as well as excellencies; third, suggestions for improving the school should be made freely; fourth, the committee reports should be presented to the Board of Education in the Annual Report of the Superintendent of Schools in place of the customary individual reports of regular day schools and districts by members of the superintendent's staff. The schools were grouped by the chairmen, so that every school in the city should be visited by at least one committee."

Later, it was said that teachers were becoming uneasy as to the objects of the visits by the groups. The superintendent then to restore confidence sent out a statement to the effect that the survey was not intended to bring the schools into comparison with one another, that the teachers were not to be marked, that the schools would be spoken of as A, B, C, etc.

Dr. Young adds: "Every effort has been made to have a frank, unprejudiced report. Defects in the plans underlying the organization of some line of instruction, or in the methods by which the plans are effectuated, are presented for consideration in order that they may be corrected. Excellencies are described, in order that the good may be participated in by all. Dissemination of information regarding these should arouse us to activity that will correct and strengthen our schools." The investigation related to the following-named topics:

The School Plant
Child Study
Physical Instruction
Humane and Moral Education
Social Efficiency
Music
Training of Teachers
Kindergartens
Reading
Spelling
Penmanship
Arithmetic and Mathematics
Geography and Nature Study
History
German
Art,—Construction
Industrial and Prevocational Education
Commercial Education in High Schools
Vocational Work in Technical High Schools
Vocational Guidance
Special Schools
Penny Lunches
Corrective Institutions

The Committee on Administration recommends a reclassification of the schools: "The separation of the elementary school and the high school creates a break in the educational progress of the children, which operates to their distinct disadvantage. The immature graduates of the eighth grade, on entering the high schools, begin an educational training under too many teachers, too much machinery, and under conditions demanding too much responsibility without the close personal supervision of a particular adviser. As a result many fail to adjust themselves and are easily lost in these strange surroundings. In order that there may be better articulation of these two parts of our public school system, a more gradual transition from the work of the elementary school to that of the high school, and a more satisfactory grouping of pupils, based on similar physical and mental development, we recommend:

1. That the ninth grade be taken from the high schools and placed in the elementary schools.
2. That the seventh, eighth and ninth grades be treated as a unit and operated departmentally."

The establishment of a department in the normal school for a thorough training of special teachers of physical training, is recommended by the Committee on Physical Education.

The Committee on Spelling sent a request to about twenty-five business firms asking each for a list of twenty-five words which it was thought the pupils of the seventh and eighth grades should be able to spell. The business houses represented almost as many kinds of business as there were requests. Five firms sent replies. The Committee states: "An analysis of these replies helps to explain why pupils are found defective in spelling, when

they seek employment in the various establishments. Each business seems to have its own vocabulary very much as each science, or art, or profession has its peculiar vocabulary. These contributions contain a total of 118 different words, out of a possible 125. Suppose we had obtained 100 such lists; at the same ratio, we should have 2,360 different words out of a possible 2,500, a very small proportion of which are within the pupils' ordinary conversational vocabulary. It is the opinion of this committee that this experience should discount very considerably the complaints said to emanate from the business houses concerning the inability of pupils fresh from the schools to spell in terms of their employer's business." A general comparison of the results of different tests given shows that as the pupil approaches his normal, every-day vocabulary, he improves in spelling; the farther removed this vocabulary is from his conversational type, the poorer he spells. "In a language spelled with such absurd and contradictory forms as we find in our English, nothing but constant drill and close attention to a reasonably limited number of words can guarantee correct spelling of one's useable vocabulary." The committee suggests that (a) "a spelling book, or fixed lists of words, should be provided and adopted for general use in the schools without excluding the privilege of using text-book lists for special study; (b) that more attention should be given in the school system to the method of study in preparing lessons." The committee is persuaded that if the same attention were given to the study of words that is given to the study of problems, spelling results would be much better.

Industrial and prevocational training is the subject of an inquiry made by another committee. In its recommendations the committee agreed that handwork in the elementary schools should be taught primarily to further the ends of good citizenship and social culture, and only secondarily for vocational purposes; further, that separate vocational schools as such should be established.

The schools, as they existed, were elementary schools, prevocational schools, which, in some cases, were situated in elementary schools, and in some cases in high schools, and schools providing for continuation and co-operative instruction.

The types of elementary schools were distinguished as, Type A (offering industrial instruction) and Type B (the older elementary type). In addition, there were prevocational classes.

It is recommended that all elementary schools be changed to those of Type A. In such schools, the handwork of boys and girls should be separated in the seventh and eighth years, and "a sufficient variety of courses should be provided, so that pupils may be given thereby an opportunity to try out prevocational work, or possibly choose a vocation."

The committee reports that in the Type A schools there is a great variety of programs. A satisfactory division of time seems to be that in which the fundamental academic subjects receive at least one-half of the time, and the courses which are in a real sense activities, such as music, physical training, art and handwork, receive the time remaining. It is recommended that there should be no period in the regular work longer than ninety minutes. A succession of academic subjects, which requires prolonged physical inaction, is equally undesirable. The opportunity afforded by the industrial courses to secure relief from fatigue by alternation and variety should be taken advantage of. "A division of the school year into ten-week periods would make it possible to introduce such a diversity into the handwork as would greatly increase its usefulness. One or more such periods could be given to the intensive work on each selected line. The cultural function of elementary education should be clearly recognized and the academic elements should in no case be subordinated to the industrial. The kinds of industrial work selected should be types in the sense of being representative of groups of industries. They should be fertile in industrial possibilities, but must imperatively be fertile in cultural possibilities. The object in view should be first the immediate development of the child, and afterward the enlargement of his experience to the point where his choice of a vocation is a real choice and not an accident. Any course which takes it for granted that a child is at an early age destined to enter a particular trade, and which aims to give him training in the technique of that trade is narrowing and dwarfing, and has no place in the elementary schools. The courses in any given district should make intelligent use of the local

occupations as points of departure, but should set the child free from the coercion of his immediate environment and make him in as large a degree as possible master of his own future. The courses should take account of the child's right to some training in the types of occupational activities, agricultural and commercial, as well as industrial."

It is further recommended that centres or schools be instituted to take the place in the system of "prevocational" classes in the high schools, and to meet the demand for a vocational type of education for boys and girls, fourteen years of age or over, in the seventh and eighth grades of the elementary schools; such centres to be called vocational schools and to include all types of vocations in their curricula. They should be equipped therefore as technical, industrial or trade schools. To such schools should be sent:

a. Pupils now sent from the various elementary schools to the "prevocational" schools.
b. Pupils between fourteen and sixteen, who are not at work or at school under the present system.
c. Pupils in grades seven or eight of a regular elementary school, over fourteen years of age, who desire to receive trade or technical training in addition to their regular elementary school work (part time).
d. Youths between fourteen and eighteen who are at work (part time).
e. Persons over eighteen who may desire to pursue the work (whole or part time).

Such schools would be in session until eight o'clock, as well as on Saturday mornings.

A plan for the organization of a Bureau of Vocational Guidance was submitted by one of the survey committees. The committee recommends that "a Vocational Guidance organization be perfected which shall consist of a Vocational Guidance Bureau to be located at the offices of the Board of Education, at the head of which shall be a director, who shall be in general charge of the work, and at least one vocational adviser in each school in the city.

The Vocational Guidance Bureau should consist of the Director and such professional and clerical assistants as the Director and Superintendent shall from time to time deem to be necessary.

The work of the Director should include the following:

a. To advise, instruct and confer with the school advisers.

b. To plan and direct a system whereby each child who leaves school to go to work may be followed up, and such assistance and advice given him as he may need from time to time; also to keep on file in his office such data gathered from the various schools as shall be of value for reference and consultation. It is understood that the work undertaken by this Bureau shall not in any way conflict with or take the place of the work of the Compulsory Education Bureau.

c. To organize and maintain a Placement Bureau which shall be conducted under his direction, and to co-operate with industrial, social and philanthropic organizations outside the schools, in their efforts to place children in suitable vocations.

d. To give advice and help to such children as the school advisers may refer to him.

e. As rapidly as possible to make surveys of the more important industries, especially of those which employ young people between fourteen and sixteen, and to have the results printed in suitable form for reference and distribution.

f. To perform any other duties appertaining to his office, which may from time to time seem necessary.

g. The work of the vocational advisers should include the following:

1. To advise pupils who intend to go to work; to furnish information to pupils and parents as to opportunities in occupations open to children.
2. To confer with the parents always before a school certificate is given.
3. To make out the school certificate after conference with the parent and pupil, and mail it to the Central Bureau.
4. To fill out in duplicate an informational card, one of which shall be mailed to the Central Bureau with the school certificate, and one kept on file at the school. This card should contain such data as are necessary in advising and placing the child intelligently.
5. Acting in co-operation with the Compulsory Education Bureau to keep track of all children to whom work certificates have been given, to ascertain whether they are actually at work, where such work is, and, so far as possible, the conditions under which they are laboring. This information should be entered on the pupil's card and kept at the school for reference.
6. As far as possible, to keep in touch with the employers of children in the neighborhood and to advise the Central Bureau of needs and conditions in local establishments.
7. To attend meetings called by the Director and perform such other work as may be necessitated by the vocational demands of the school.

The Central Bureau should always act in harmony with the Bureau of Compulsory Education, both in reference to the follow up work and the issuance of work certificates. In all cases where necessity arises the powers of both departments should be con-

centrated to accomplish the observance of the law, and consequently the highest interest of the child."

E. Recent Applications of Tests

The value of tests, the method of their application, their variety and appropriateness, all these are matters of endless discussion. From some of the literature on the subject these selections are made that may prove suggestive.

1. The Milwaukee Self-Testing Cards

The Milwaukee department of education has arranged a set of self-testing cards for pupils.

Questions on the essential features of the grade work are printed in large type on cards that are place din conspicuous parts of the class room, so that pupils can read them at all times and form the habit of testing themselves.

"The cards have proved to be of great value to the teachers by placing before them the essentials of the grade work of all previous classes, and thus aiding systematic review."

(Copies of the self-testing cards are filed in this office, and, to all those who may be interested in them, they are available for reference.)

2. Business Tests of the National Associated Schools of Scientific Business

Under the name, "National Associated Schools of Scientific Business," a national committee has been incorporated to secure a higher uniform standard in commercial education, and greater co-operation between business men and educators.

A successful program for commercial education requires that there be found a common ground on which the business man and the educator can meet, and from which they can begin to work. It is suggested that such a starting point may be found in a series of standard tests of ability, which the school can use in determining whether its graduates can meet the demands of the commercial world, and which the business man can use in selecting employees.

The employment managers of a number of large firms, among whose employees careful studies have been made, agree that the following requirements are indispensable for all beginners in the office (office boys and others of similar grade): (1) ability to copy addresses accurately in legible handwriting; (2) accuracy and some speed in adding, subtracting, multiplying and dividing whole numbers, decimals and the few easy fractions common in business; (3) ability to spell a few hundred words common in business; to recognize and punctuate a sentence; and to correct a few of the grosser errors in grammar, use of words and pronunciation.

These attainments should be prerequisite for admission alike to the business office as a beginner, and to any commercial course. Without this foundation of elementary education there is little hope of success. After the completion of the commercial course in public or private school, there should be, it is suggested, a series of advanced tests, designed to demonstrate the following: (1) knowledge of short cuts in arithmetic; habitual accuracy in handling figures, with a certain minimum speed; clerical accuracy as well as intelligence in filling out business forms, as the foundation upon which bookkeeping skill can be built up; (2) accuracy on the typewriter approximating 99 per cent., with a speed of 20 to 35 words per minute (ability to use the typewriter is desirable for all office employees, and even sales persons;) for stenographers, a speed of 100 words per minute in taking dictation, and ability to transcribe notes without making gross blunders, and not more than two or three minor errors per 100 words; (3) ability to spell 75 to 90 per cent. of words like those suggested below and the habit of referring to the dictionary in all cases of doubt; to punctuate properly common business matter; to correct ordinary errors of grammar involving agreement of subject and predicate, reference of pronouns, relation of participial phrases and subordinate clauses, etc.

Advanced spelling test; examples of words to be used in the test for first class stenographers are:

accessible	cashier	acknowledgment
advise	champagne	arrangement
Cincinnati	accrue	arraign
accommodate	attorneys	calendar
committee	canvass	anxiety

biscuit	campaign	course
alignment	advice	coarse
canvas	achievement	

The National Committee has prepared a set of tests of the type suggested in this article. Copies may be obtained upon application to the United States Bureau of Education.

3. THE COURTIS TESTS IN INDIANA

An interesting study of the results obtained from the Courtis Tests, Series B, has been made by M. E. Haggerty, Director of the Bureau of Co-operative Research, Indiana University. It is entitled "Arithmetic—A Co-operative Study in Educational Measurements," and was undertaken at the request of Mr. Courtis, who asked that the psychological laboratory of Indiana University serve as a clearing house for the Courtis Standard Tests in Indiana.

Twenty cities represented in the Indiana City Superintendents' Research Club gave the Courtis Tests in their schools and forwarded the results to the laboratory. A comparative study of these results was made.

The report in the first place presents the results in the form of distribution tables showing for each test the number getting each score or the per cent. of children making each score. The same data are shown in concrete form by the use of graphs. The graphs are of three kinds. The first represents the medians, the second the variabilities, and the third shows the dependability.

"The reader may study the tables in either of two ways. He may study a table at a time comparing one city with another as to median, variability, mode, minimum score, maximum score, etc., or he may choose one city and follow it through each of the thirty-two tables, noting the relation of problems attempted to problems correctly solved; the relation of efficiency in addition to efficiency in subtraction, multiplication and division; the relative efficiency of the fifth grade to the sixth, seventh and eighth grades."

The median scores of all the cities are brought together in one table. The average of the city (each city considered a unit) is found as well as the average for individuals. Comparison of

these averages with other available standards, viz., Courtis' standards, and the results obtained in Detroit and Boston, shows Indiana in second place in grades 5, 7, and 8 and in third place in grade 6.

The scores of the various cities show that cities do not maintain the same rank in all measures. "Thus city 10, which had first place in seventh grade multiplication rights, and which ranks 3 in the entire set of tests falls to rank 13 in the 5th grade division rights." The relative achievement of a school system serves to reveal or locate its strength and weaknesses.

It is interesting to note that there is not a case where a city does not do better than the average in at least one thing.

The study also shows the specific character of the habits involved in the skills measured in these tests. Efficiency in one process shows no correlation with efficiency in any other process. "What does this mean except that children learn those skills in which they are instructed effectively? The others they do not learn."

Another important feature is the consideration of the variability shown in scores. This gives a more adequate idea of the distribution in any particular tests than maximum and minimum scores. The variabilities for the several grades of the several cities are tabulated for comparison and are put in concrete form in graphs. Great fluctuation is revealed from grade to grade and from process to process within the several grades. The per cent. of variability will be low if the class is homogeneous, where the students are equal in achievement. Accordingly, the per cent. of variability of a class may be a measure of the closeness of grading.

"The smaller the variability, other things being equal, the more efficient the teaching. Variabilities of 12 per cent. to 15 per cent. represent good work under present conditions. In the near future these will probably be reduced to 5 per cent. and 10 per cent. *

None of the twenty cities was found to have a variability of less than 16 per cent. so that measured by the standard of Courtis no one of the cities is doing "good work." The conclusion is stated that the exceedingly high figures shown are due to our

* S. A. Courtis.

constant failure to know the needs of the individual children, and indicate the failure of our group methods of instruction.

Besides considering variablity, the study takes up the question of "dependability" which may be considered a measure of school work. Dependability is expressed mathematically by dividing the number of problems correctly solved by the number of problems attempted. Percentages in this factor for each city in the respective tests are given in tables and graphs. No grade in any city attained more than 91 per cent. of dependability. Of the four fundamental processes, the work in addition appears least dependable and the work in division most dependable except in the fifth grade. A uniform increase in dependability from grade to grade is shown with the exception of a slight inversion in division. The gain is, however, with two exceptions, very slight.

A comparison of the rankings of the cities in dependability with their standings in medians shows an inverse correlation of .46 (method of rank differences).

Part Two of the study considers the use of the Courtis Tests as an instrument of research. Two forces, the inherited qualities of the children and the environmental conditions remote and immediate, are the determinants as to what any child or any group of children may do with the Courtis' Tests. These possible causes of variations may be studied by means of the standardized tests and the extent of their influences actually determined.

Two of the possible factors in efficiency in arithmetic, *i.e.,* the time of beginning, and secondly, the amount of time devoted to it, are considered. Reports were obtained from each city as to the time of beginning arithmetic for each of the grades. The data were then classified into three groups according to time of beginning, *i.e.,* in first year, second year, third year. The three groups were ranked in the several points, and similarly for variability. The second year beginners ranked first for the total for each grade, and for the total for all grades. This is true both in medians and in variabilities. When one considers the various individual points the superiority of the group who began in the second year is not so clear cut nor distinct. The margin of superiority is so slight that the question arises as to whether or not it is not due to other causes than time of beginning. The same

is true of the data in respect to variabilities, and similar conclusions are indicated by the tables of dependabilities, all of which seems to prove that time of beginning (while it may be very important) is not the determining factor.

The second question considered in this part of the study is that as to how much time it is profitable to spend on arithmetic. From detailed questionnaires it was determined just how much time has been spent in arithmetic work by the four grades (5, 6, 7, 8) in each of the twenty cities, up to the time of taking the test. The pupils were classified according to the amount of time spent on arithmetic and the grades ranked according to the medians of the scores. The table showing the rankings reveals the fact that in no case does first rank go to the pupils spending the most time on arithmetic. The best time allotment apparently is between the two extremes. These conclusions confirm the results of Stone's study in arithmetical abilities.

The significance of this co-operative study, as the conclusion states, is not so much in the use of a standardized scale, although that is a thing of note. More important is the plan of co-operation by which the school superintendents on the one hand and the laboratory staff of the University on the other hand joined forces and facilities. The resulting study is a testimony to the efficacy of such a plan.

VI. MISCELLANEOUS AND GENERAL

A. School Text-books

1. The selection of text-books and the teachers' relation thereto

In New York City text-books are adopted by the Board of Education, after approval by the Committee on Studies and Text-books, the original recommendation coming from the Board of Superintendents. The approved list offers wide scope for discretion by principals of schools in the selection of texts. Doubtless principals as a rule confer with the teachers of the school in selection from the approved list the books for use in the school.

Superintendent R. J. Condon, of Cincinnati, has recommended to the Board of Education of that city, a policy for the adoption of text-books which he describes in the following terms:

"I believe this should be the established order for the adoption of all books: First that the books to be used in any department or subject should have the careful consideration of the teachers directly concerned with such use; that this examination should be deliberately made, taking into account all desirable books which may be available; that the conclusions reached should be transmitted to the Superintendent in the form of a written report, either as the unanimous or as a majority and minority report of the teachers who have considered the matter.

"Second, That the superintendent should carefully consider these recommendations, transmitting the same to the Board of Education, and stating in writing whether he agrees or disagrees, and if the latter, why.

"Third, That, as required by statute, the board should make the formal adoption. No book should be adopted, however, that has not been considered by both teachers and the superintendent; the board may not agree with the recommendation by the superintendent that has not had the consideration of the teachers.

"In the selection of text-books, as in the appointment of teachers, the question to be answered is the question of merit. I believe the method of selection which I have proposed is well calculated to determine the question. It recognizes the right of teachers to say what books they would like to have with which to do their work; it corrects the individual point of view by having a representative committee pass upon the subject; it gives the superintendent the right to review and the opportunity for approval or disapproval; it gives the board of education the right to review the recommendations of both teachers and the superintendent. The superintendent may not agree with the recommendations of the teachers; the board may disagree with the recommendations of both; but neither the superintendent nor the board should act until the subject has first been considered by the teachers."

2. STANDARDIZING THE SELECTION OF TEXT-BOOKS

An interesting attempt has been made to standardize by an arithmetical table, the relative value of school text-books in the schools of Joliet, Ill.

Superintendent R. O. Stoops in co-operation with Miss Edna Keith, a member of the high school faculty, has devised and put into operation a text-book score card. The plan calls for a separate card for each subject in the elementary school curriculum and each individual book is considered from the three aspects of subject matter, mechanical makeup and pupil problems.

Each card consists of a single sheet, on the right side of which are columns (one for each book), and on the left, a list of fifteen points from which the books are to be considered. Ten of these points refer to the details of the subject matter, five to the makeup and five to the need of the pupil.

In preparing for a selection of text-books, copies of the score cards are given to each member of the text-book selection committee. A list of needed books is provided and the committee proceeds to read the books of the respective concerns, making its notations opposite the proper spaces on the cards.

After the score sheets have been turned in, the superintendent and his assistants carefully inspect the list, noting the points scored, and select the four best. The final choice is made from the latter.

So far as known, the Joliet score card is the only one of its kind in use in the elementary schools of the country, and its use will assure any school of the best there is in text-books. Text-book publishing companies have taken a great deal of interest in the cards and have even printed and distributed them with their books.

The following is a specimen score sheet used for the selection of readers:

READING SCORE CARD

Rate I on basis of 50
Rate II on basis of 25
Rate III on basis of 25

I. Subject matter.
   1. Value as literature
   2. Value if not literature
   3. Appeal to child's interests
   4. Moral value
   5. Variety in type including humor
   6. Adaptability to dramatization
   7. Quantity of material
   8. Amount of suitable poetry
   9. Gradation of material
   10. Material invented for sake of method. If so, does method outweigh lack of literature and thought material

II. Mechanical Make-up of Book.
   1. Binding. a. Flexible. b. Durable. c. Artistic.
   2. Paper
   3. Type
   4. Arrangement of page. a. Crowded. b. Length of lines. c. Margins.
   5. Illustrations. a. Appeal to children. b. Aid in getting thought of selection. c. Execution. d. Location of page. e. Distribution through book.

III. Pupil's Problem.
   1. Sentences within grasp of child as to thought and construction.
   2. Vocabulary. a. Within grasp of child. b. Introduced gradually. c. Amount of repetition. d. Number of words
   3. Treatment of phonics
   4. Development of independence in child
   5. Uniformity of series from pupil's standpoint

Total Rank

The Arithmetical Score Card is made up as follows:

Rate each point on basis of 10.

1. Language within comprehension of children of given grade
2. Material practical and adapted to experiences of children
3. New subjects carefully introduced
4. Problems well graded as to difficulty
5. Arranged to develop independent thought
6. Effort to motivate problems and thus arouse interest
7. Sufficient material
8. Systematic reviews provided
9. Sufficient oral or mental work
10. Treatment of fractions
11. Attention to business forms
12. Absence of obsolete matter, such as Apothecaries Weight, True Discount, etc.

B. School and Home Gardens in Cities

The United States Bureau of Education has made certain recommendations concerning gardening for city schools which are meeting with general approval. The distinctive features of the Bureau's plan are as follows:

"1. The utilization of home back-yards for children's gardens, vacant lots or larger tracts for the making of individual plot gardens, giving the children when possible larger plots than are usually allotted in the common type of school garden.

"2. The engagement of a teacher, trained and skilled in gardening, for each elementary city school with its two to four hundred children. More than one teacher will be necessary for the larger schools.

"3. The garden teacher should be engaged for twelve months with provision, if desired, for a vacation during the winter.

"4. The garden teacher should give instruction during school hours in elementary science, nature study, or the regular school subjects as desired.

"5. In afternoons, on Saturdays, and during the summer vacation the garden teacher should direct the work of gardening, whether in the back-yards or on vacant tracts of land. Early in the season the teacher works with local groups of children and later makes frequent visits to the individual gardens.

"6. The children are urged to make large gardens and to conduct them as nearly as possible on a commercial basis.

"7. The products of the garden should be used to supply the home; and the surplus, with the assistance of the garden teacher, should be profitably marketed, either in the fresh or canned condition.

"8. Concisely stated, the plan calls for an intensive system of gardening, the application of business methods, intelligent direction, and close supervision."

The objects and results of such a plan may be summarized as follows:

"1. To provide the children of our cities and towns with a kind of active experience which will vitalize their school studies and which is necessary for the full and natural development of all the faculties.

"2. To provide boys and girls with wholesome, purposeful and remunerative employment while attending school in order that they may contribute to the support of themselves and the other members of the family, and consequently enable them to remain longer in school and escape the evils attending early confinement in shops and mills. Such employment should also develop industrious habits at the most receptive age and save the children from the evils attending idleness.

"3. To provide a wholesome form of recreation and an opportunity to acquire a knowledge of the phenomena and forces of nature, the possession of which makes life fuller and richer.

"4. To develop in children a civic pride and a love for the beautiful, resulting in a greater respect for the appearance of public property and an improvement of home suroundings."

C. Keeping the Pupils in School—A New Orleans Experiment

In January, 1915, the School Board of New Orleans adopted the following recommendation of the Superintendent of Schools:

> "In order to encourage the pupils in the grammar and high schools to remain in school until they have completed the work of the high school, I recommend that the week beginning January 18, be designated as "Stay in School Week" during which week a campaign shall be made in all of the grammar grades and high schools. The object of this campaign is: (1) to discover and retain for the schools the children who are being eliminated for any cause; (2) to stimulate and encourage parents and pupils in the matter of prolonging school life; (3) to secure active co-operation of the press and of prominent citizens who may act as speakers at schoolhouse meetings during this week: (4) to unify and utilize in this definite, specific undertaking (to lessen elimination) the efforts of our various civic organizations, such as Public School Alliance, Parents' Co-operative Clubs, the Presidents' Co-operative Club, New Orleans Educational Association, the Alumnae Associations of the High and Normal Schools, the Association of Commece and the Board of Trade."

Following this action by the Board, invitations were sent to the heads of the organizations named and about one hundred citizens to meet in the office of the School Board for the purpose of planning the campaign. Not all invited were able to attend, but a representative body of citizens met, and with the President of the School Board presiding, perfected plans for the conduct of the campaign. It was decided to hold one meeting for grammar grade pupils in each grammar grade school and one meeting for patrons and parents in each of the high schools for high school pupils, and on January 20th, the seventh and eighth grade pupils were to visit their respective high schools for the purpose of acquainting themselves with the advantages and opportunities offered in these schools. Under the direction of the general citizens committee, a corps of speakers was selected, other speakers to be secured by the principal of each grammar school, co-operating with the parents' club of the school.

The campaign was carried out as planned. There were 48 meetings for pupils and 51 for parents and patrons; 11,000 boys and girls in the grammar grades heard a total of 104 addresses; 5,195 persons attended the meetings for adults, at which meetings a total of 120 addresses were made.

The week following the campaign a request was sent to the principal of each high school asking for definite information concerning the results of the campaign. The following facts are taken from the principals' reports: 92 8A pupils who had decided not to go to the high schools have entered the high schools; 63 of these going to the high schools have changed from shorter to longer courses; 98 pupils who had decided to leave school in the near future were influenced to change this decision; 223 parents are reported as having definitely decided to keep their children in school longer than they had expected to do.

D. The Pay of School Janitors; A Salary Schedule Prepared by the Janitors of the Cambridge, Mass., Schools and Accepted by the Board of Education

The School Board of Cambridge, Mass., in March, 1914, adopted a schedule of janitors' salaries presented to the Board by the Cambridge Schoolhouse Janitors' Association. Five factors have been used as a basis for the schedule: (1) cleaning; (2) heating, ventilation and superintendence; (3) washing of windows; (4) care of yards and sidewalks; (5) care of lawns.

Compensation for *cleaning* is fixed on the basis of the total floor area of the buildings. The total floor area is also the basis of compensation for *heating, ventilation and superintendence,* but as a higher degree of intelligence and skill is required to operate and care for the heating and ventilating plants of certain buildings than is necessary for the care of others, the buildings have been divided into three classes, in the order of requirements for intelligence and skill, and the compensation has been fixed in such manner as to recognize this difference. Compensation for *washing of windows* is fixed on the basis "of the total area of the sashes, and at the rate of $0.005 per square foot for one washing on both sides of the glass." "Compensation for the care of *yards* and *sidewalks* shall be on the basis of their total area and at the rate of $0.002 per square foot; and for the care of lawns, shall be on the basis of their total area and at the rate of $0.003 per square foot."

The compensation for the janitor service of a single building is arrived at by adding together the several amounts determined

by applying the five factors of the schedule to the areas of buildings, windows, yards, sidewalks and lawns. For janitor service in two or more buildings, each containing two or more class rooms, in charge of the same janitor, the compensations shall be for the first and largest building. For each additional building, full schedule rates shall be allowed for washing of windows, care of yards and sidewalks, and care of lawns; for cleaning, heating, ventilation and superintendence of such additional buildings, the compensations shall be eighty per cent. of the schedule rate.

The compensation for janitor service in buildings in which the heating apparatus is not complete, but is supplied by heat from a plant not under the control of the janitor, is established in the following manner: "Full schedule rate is allowed for cleaning, washing of windows, care of yards and sidewalks, and care of lawns; for heating, ventilation and superintendence, the compensation shall be at the rate of fifty per cent of the schedule rate."

A minimum wage of salary was adopted as follows:
Buildings of four rooms, $12 per week
Buildings of 5 or 6 rooms, $14 per week
Buildings of 7 or 8 rooms, $17 per week

All buildings of nine rooms and over are to be paid by the measurement system in accordance with the schedules.

Where a school building is used exclusively as a trade school, which necessitates janitor service later than in an academic school, such school is measured up as per schedule, and to the annual salary as per schedule is added twenty per cent. of the same.

Special rates were adopted for two school buildings requiring the services of an engineer.

Compensation for the extended use of school buildings is not included in the schedule.

"The schedule carries with it the seniority of service and merit system of promotions, viz: Where a vacancy occurs in the janitor service, such vacancy shall be filled by the appointment of the janitor longest in service, and who shall have applied for it, all things being equal."

E. A School for Janitors

The modern systems of cleaning, heating, ventilating, disinfecting and general oversight of school buildings, require the services of not only an intelligent man but of one who has had specific training.

At Racine, Wisconsin, during the past year, the school janitors took a course of instruction to learn the most efficient methods of carrying on their work. They met once a week in the school buildings. A few main topics of the course of twelve lessons are:

1. Proper amount of air for good ventilation; methods of measurement of air.
2. Moisture in air. Why necessary for successful ventilation. Means of measuring moisture in air.
3. Descriptions of various systems of ventilation and their use; discussion of direct and indirect heating, thermostats and installations, etc.
4. Care of boilers, heating surfaces, priming, corrosion, boiler cleaning, amount of steam, etc.
5. Proper combustion of coal; fuel values of anthracite, bituminous coal and semi-bituminous coal; firing, dampers, drafts, etc.
6. Sanitation, including discussion of germs, disinfectants, plumbing, sweeping, cleaning, etc.

F. Reporting Accidents in Schools—A Form of Report Used in the Milwaukee Schools

When an accident of serious nature occurs to a child in a Milwaukee public school, the principal is required to fill out a form of which the following is a copy:

MILWAUKEE PUBLIC SCHOOLS ACCIDENT CARD

Name of School or Playground.....
Injury sustained by.....
Address .....
Place where injured.....
Date of injury (Please state exact day and hour).....191....at.....M
How did the accident occur?.....
Describe the injury fully and state what external or visible evidences of the same you find on examination.....
What aid was given immediately after injury?.....
Is she subject to or affected by any bodily or mental disease, weakness, he
infirmity or deformity or previous injury which might contribute to cause the accident?.....
Any other facts of importance or interest?.....

WITNESSES TO ACCIDENT:

..... Signed.....
..... Position.....
..... Date.....

NOTE: Kindly make this report in duplicate and send one copy to Superintendent of Schools and one copy to Chief Medical Inspector.

G. THE RELATION BETWEEN OBSTRUCTED BREATHING AND MEMORY

A Study by Felix Arnold

In the Psychological Clinic, January 15, 1915, appears a contribution from Dr. Felix Arnold, Principal of Public School 30, Manhattan. In this article he describes certain tests to determine the effect of obstructed breathing on memory. In summarizing his conclusions, he states:

1. "In all cases of obstructed breathing from whatever source, there will be a loss in the results of memorizing verbal matter of from 10 to 30 per cent;

2. "There will be no practice effects;

3. "Where the work is new and difficult the loss will run as high as 50 per cent;

4. "With more mature pupils, in fifth through eighth school years, the loss is due to physiological causes;

5. "With less mature pupils, in third and fourth school years, the loss is due as much to dsitraction as to interference with breathing;

6. "In terms of classroom practice, obstructed breathing prevents any progress through drill, and hinders assimilation of new matter sufficiently to cause non-promotion of the pupil concerned."

The above conclusions seem conservative in view of the simplicity of many of the tests given. The importance of cleanliness, removal of adenoids, etc., need not be dwelt upon.

VII. NOTES ON SOME PUBLICATIONS OF SPECIAL INTEREST TO TEACHERS

The Bulletins of the United States Bureau of Education afford very interesting and valuable material. They may be obtained on application to the Superintendent of Public Documents, Government Printing Office, Washington, D. C.

Other publications, bulletins, etc., mentioned in this chapter, may be consulted in the office of this Division.

A. Kindergarten and Elementary Instruction

"The Montessori Method and the Kindergarten" is a careful study of Dr. Montessori's work. Bulletin 28, 1914—U. S. Bureau of Education.

The Gary Schools. A detailed account of the organization and work of the Gary schools is given in Bulletin No. 18, 1914—U. S. Bureau of Education.

A Bibliography for Teachers of History in Elementary Schools: *The Elementary School Journal* in the April, 1915, number gives the following lists of recent or comparatively recent publications, which contain material of interest and value to history teachers in the grades below the high school:

Macé, W. H., Method in History. Rand, McNally & Co., Chicago, 1914.

Wayland, J. W., How to Teach American History. Macmillan, Chicago, 1914.

McMurray, C. A., Handbook of Practice for Teachers, Macmillan, Chicago, 1914.

Indiana University Studies, No. 17, Indiana University, Bloomington, Ind.

Elson and MacMullan. The Story of the Old World. E. P. Dutton & Co., New York, 1911.

Benton and Bourne. Introductory American History. D. C. Heath & Co., Chicago, 1912.

Gordy, W F. American Beginnings in Europe. Scribner, New York, 1912.

Harding, S. B. The Story of Europe. Scott, Foresman & Co., Chicago, 1912.

Nida, W. L. The Dawn of American History in Europe. Macmillan, Chicago, 1913.

Atkinson, Alice M. An introduction to American History. Ginn & Co., Chicago, 1914.

A Brief History of the United States. Emerson School, Gary, Ind., 1913.

Maurice C. Tex. History for the Eighth Grade. Published by the author, Taylorville, Ill., 1914.

History for the Seventh Grade. Similar pamphlet.

An Outline of United States History. A. Flanagan Co., Chicago, 8th Edition, 1913.

Glass, L. W. A Comprehensive Typical Study of United States History and Pennsylvania History, published by the author, Jeannette, Pennsylvania, 1914.

Up-to-date Regents' Questions in Elementary United States History and Civics. Bardeen, Syracuse, New York, 1914.

The Community and the Citizen. D. C. Heath & Co., Chicago, 1914.

American Civics for the Seventh and Eighth School Years. Hinds, Noble & Eldredge, New York, 1913.

The Teaching of Civics. Houghton, Mifflin Co., 1914.

A Course in Citizenship. Houghton, Mifflin Co., 1914.

Bird and Starling. Historical Plays for Children. Macmillan, Chicago, 1912.

Shoemaker, Blanche, Colonial Plays for the School-room. Educational Publishing Co., Chicago, 1912.

Tucker and Ryan, Historical Plays of Colonial Days. Longmans, Green & Co., Chicago, 1912.

Bates and Orr, Pageants and Pageantry. Ginn & Co., Chicago, 1912.

Teachers and parents will find helpful a list in "The Elementary School Teacher," May, 1914, "Some Books on Children's Reading and Story-Telling."

Kennedy, H. T. Suggestive list of children's books for a small library, recommended by the League of Libary Commission. Democrat Printing Co., Madison, Wis.
An excellent classified list of children's books. Contains over a dozen special supplementary lists such as, Books for youngest readers, Books for mothers and teachers, Children's stories for telling and reading aloud, Sea Stories, Indian stories, Camping and outdoor life, Stories for holidays.

Carnegie, Library of Pittsburgh—Catalogue of books, annotated and arranged, and provided by the Carnegie Library of Pittsburgh for the use of the first eight grades in the Pittsburgh schools. A well selected annotated list of the best books for children.

Potter, M. E. Children's catalogue; a guide to the best reading for young people based on twenty-four selected library lists. H. W. Wilson Co., 1909.
Part 1 contains an author, title, and subject catalogue of 3,000 books. Part II is an author and subject index to St. Nicholas, vols. 28-36.

Bailey, C. S. For the story-teller; story-telling and stories to tell. Bradley.
The book is planned for teachers and parents. The first half is devoted to a discussion of children's literature and the second half to stories for telling.

Bailey, C. S., and Lewis, C. M. For the vhildren's hour. Bradley.
A great variety of stories designed for the use of kindergartners, teachers, and mothers.

Boston collection of Kindergarten stories. Ed. Hammett.
Good standard work. Much used by kindergarten and primary teachers.

Bryant, S. C. How to tell stories to children. Houghton.
Contents: The purpose of story-telling in school. The selection of stories to tell. Adaptation of stories for telling. How to tell the story. Some specific schoolroom uses. Stories selected and adapted for telling. Sources for the story-teller. The second half of the book contains stories for the kindergarten and first five grades.
Stories to tell to children. Houghton.
A collection of some fifty stories for young children.
Best stories to tell children. Houghton.
"The stories in this book, some very old and unchanged, some new and some changed from an older form, grew into their present shape by the process of being told to children, many, many times."

Colby, J. R. Literature and life in school. Houghton.
Contents: A plea for literature in school. Literature and the first four years of school life. Literature and the second four years of school life. Methods of handling literature in school. Literature and life after the elementary school. Graded lists of books, poems and prose, suitable for reading in elementary school, make up the rest of the book.

Cole, Mrs. J. D. Stories to tell. Flanagan.
Stories for the young children.

Cox, J. H. Literature in the common schools. Little, Brown & Co.
A guide for teachers that presents in a clear, simple way the main problems connected with children's reading. Contains also helpful lists.

Field, W. T. Fingerposts to children's reading. McClurg.
"Essays on various phases of children's reading; addressed to parents and teachers, librarians, Sunday-school workers —all who are concerned with the education of the child."

Hoxie, J. L. Kindergarten story book. Bradley.
A collection of short, simple stories designed for the teachers, mothers, or children themselves.

KEYES, A. M. Stories and story telling. Appleton.
One-fourth of the book is given to a discussion of children's literature; the rest contains about seventy-five short stories that the author has repeatedly used with young children.

LINDSAY, MAUD. Mother stories. Bradley.
Good collection of ethical stories to tell to young children.

LYMAN, EDNA. Story-telling: what to tell and how to tell it. McClurg.

MACCLINTOCK, P. L. Literature in the elementary school. University of Chicago Press.

MACY, JOHN. A child's guide to reading. Baker & Taylor.

MOSES, M. J. Children's books and reading. Mitchell Kennerley.
Contains much interesting and valuable material on the development of children's literature. One-third of the book is given over to lists of books for children.

O'GRADY, ALICE, and THROOP, FRANCES. The teachers' story-teller's book. Rand, McNally.
"These stories, beginning with short narratives to follow the nursery rhyme and moving through more developed tales, both in structure and content, are intended to supply literature for children from four to eleven years of age; in other words, from the kindergarten to the fifth grade."

OLCOTT, F. J. Children's reading. Houghton.
The aim of this book is to meet in a simple and practical way the following questions often asked by parents: Of what value are books in the education of my children? What is the effect of bad reading? How may I interest my children in home reading? What kind of books do children like? What books shall I give the growing boy and girl? Where and how may I procure books?

OLCOTT, F. J. Story-telling poems selected and arranged for story-telling and reading aloud and for children's own reading Houghton.

POULSSON, EMILIE. In the child's world. Heath.
Stories for young children.

RICHARDS, Mrs. L. E. H. Pig brother and other fables and stories. Little, Brown & Co.
Thirty-five short stories adapted to telling young children.

WIGGIN, Mrs. K. D. S., and SMITH, N. A. Story hour; a book for the home and kindergarten.

WYCHE, R T. Some great stories and how to tell them. Newson.

B. SECONDARY AND ADVANCED INSTRUCTION

Bulletin No. 47, 1914, U. S. Bureau of Education, "City Training Schools for Teachers," contains a comprehensive account of the organization, management and work of the city normal or training schools in the United States.

A careful study of the education and training of teachers for the schools in England, Scotland, Germany and some other countries, has been made by Dr. Judd of the University of Chicago, and published in Bulletin No. 35, 1914, U. S. Bureau of Education.

"Bibliography of the Relation of Secondary Schools to Higher Education," Bulletin No. 32, 1914, U. S. Bureau of Education includes discussions of the subject but not "purely formal documents and reports, such as statements of entrance requirements or recommended courses of study, except when these are arranged in comparative form, or accompanied by a valuable discussion."

"Curricula in Mathematics," Bulletin No. 45, 1914, U. S. Bureau of Education, contains a statement of courses in the subject in the United States and in the leading countries of Europe, and certain important points of difference between the work in mathematics abroad and in the United States.

The University of Wisconsin has published "a course in moral instruction for the high schools." (Bulletin No. 565, High School Series No. 7.) The purpose of the course is "to lead the pupil to serious and systematic reflection about success and failure. What are the intellectual faculties which he must train, at first in school, and later in life? What is the relation between the effective management of the body and success in life? What traits of character must one possess in order to become successful? What are the elements of life that are genuinely worth while and how may one attain them?"

A Manual of Debate which is intended primarily for the use of high school societies has been published by the Extension Division of the University of Wisconsin. In this manual have been brought together the following-named bulletins published by the Department of Debating and Public Discussion:

Debating Societies—Organization and Procedure
Principles of Effective Debate
How to Judge a Debate
Suggested Constitution for Triangular Debating Leagues
School Literary Societies

The manual includes a number of questions for debate.

C. Vocational Instruction

Bulletin No. 1, 1915, U. S. Bureau of Education, deals with the teaching of cooking for home-making purposes in the day and evening classes of the vocational school.

A brief analytical account of some trade schools in England, Ireland, Scotland, Germany, France and Belgium, and a statement concerning certain apprenticeship systems are given in Bulletin No. 23, 1914, U. S. Bureau of Education.

A list of helpful publications concerning vocational instruction is given in Bulletin No. 569, June 15, 1914, University of the State of New York, Division of Vocational Schools.

D. Vocational Guidance

Vocational guidance is the subject of Bulletin No. 14, 1914, U. S. Bureau of Education. It contains the following papers:

Vocational guidance and child labor—Owen Lovejoy.
The larger educational bearings of vocational guidance—George H. Mead.
Studies in occupations—Leonard P. Ayres.
Lessons Europe has for us—Meyer Bloomfield.
Psychological tests in vocational guidance—Leonard P. Ayres.
Necessity of professional training for vocation counseling—Frederick G. Bonser.
The present trend of vocational guidance in the United States—Helen T. Woolley.
Guidance by means of a system of differentiated courses—Alfred P. Fletcher.
Guidance by systematic courses of instruction in vocational opportunities and personal characteristics—F. M. Giles.
Guidance by the development of placement and follow-up work—Sophonisbis Breckenridge.
Developing placement and follow-up work—Charles Martin.
The Continuation Schools of Cincannati as a means of vocational guidance—Edward D. Roberts.
How shall we study the industries for the purposes of vocational education—Charles R. Richards.
How shall we study the industries for the purposes of vocational guidance—Frank M. Leavitt.

E. Miscellaneous

(Bulletins of U. S. Bureau of Education)

The status of drawing and art in the schools of the United States is shown in Bulletin No. 13, 1914.

Bulletin No. 33, 1914, undertakes to give an account of the present status of music teaching in the public schools of the United States.

In Bulletin No. 4, 1915, "The Health of School Children," are published contributions from American medical journals, July, 1913, to July, 1914, compiled by Dr. W. H. Heck, Professor of Education, University of Virginia.

Bulletins Nos. 36, 37, 38, 39, 1914, bring together "facts regarding education for the home in American schools of various grades from the elementary school to the university, and also statements regarding certain supplementary agencies and organizations whose work is in this field."

The value of school savings banks is widely recognized, and the collecting and accounting of penny savings of school children is an important feature in many schools. Bulletin No. 46, 1914, gives information relative to the origin and growth of these school banks and the methods of conducting them, and includes the New York City rules and regulations for organizing and conducting savings banks in the public schools, published in Document No. 6, 1914, Board of Education.

Bulletin No. 48, 1914, describes the educational Museum of the St. Louis Public Schools. It is a travelling museum that goes to the schools with illustrative material at the time it is needed. Among the group of exhibits are food products, tree products, industrial products, material for clothing, mounted animals, articles and models illustrating the life and occupations of different peoples of the world, minerals, maps, photographs, charts and colored pictures illustrating history, and charts illustrating geography, astronomy and physiology. Lantern slides and stereo-

scopic views are included. The schools are divided into five sections, each of which has a delivery day once a week. The principals send to the curator of the museum an order indicating numbers of the collections that will be required. The material is sent to the schools in a large automobile truck in the service of the museum. When the material is delivered, the collection used during the previous week is returned.

Bulletin No. 16, 1914, "The Tangible Rewards of Teaching," is a detailed statement of salaries paid to the several classes of teachers and school officers in schools of the United States.

DEPARTMENT OF EDUCATION—THE CITY OF NEW YORK
DIVISION OF REFERENCE AND RESEARCH

Publications

Teachers' Year Book of Educational Investigations—By ISIDOR SPRINGER, Ph. D.—Bulletin No. 1—1914.

Material for Arithmetical Problems—Bulletin No. 2—1914.

The School Lunch Service—By EDWARD F. BROWN, Executive Secretary, New York School Lunch Committee—Bulletin No. 3—1914.

Examining, Selecting and Training Teachers—Document No. 5, Board of Education—1914. (Out of print.)

Semi-Annual Report of the Division of Reference and Research—July, 1914.

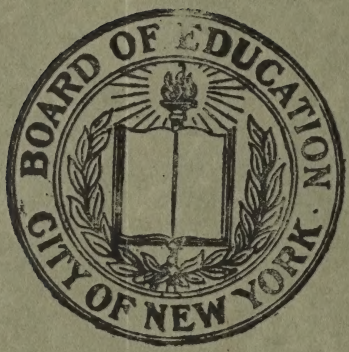
Teachers' Year Book of Educational Investigations—By ISIDOR SPRINGER, Ph. D.—Publication No. 6—1915.

Assignment of Assistants to Principals and Clerks in Elementary Schools—Publication No. 7—1915.

Assignment of First Assistants in High Schools—Publication No. 8—1915.

Organization of Classes in Elementary Schools—Publication No. 9—1915.

Report on the Organization of the Board of Education and Its Committees—Publication No. 10—1915.

The School and the Immigrant—Publication No. 11—1915.

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